

**THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET IN  
COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART, ON THURSDAY  
24 TEMBER 2009**

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**ROYAL HOBART HOSPITAL REDEVELOPMENT PROGRAM**

**Ms JULIE VIECIELI**, EXECUTIVE DIRECTOR, ACUTE OPERATIONS, ROYAL HOBART HOSPITAL; **Mr LES BURBURY**, MANAGER INFRASTRUCTURE INVESTMENT, DEPARTMENT OF HEALTH AND HUMAN SERVICES; **Mr PETER ALEXANDER**, DIRECTOR ASSET MANAGEMENT SERVICES AND **Mr MICHAEL PERVAN**, ACTING CHIEF EXECUTIVE OFFICER, ROYAL HOBART HOSPITAL WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

**CHAIR** (Mr Harriss) - Thank you all; as always we appreciate the site visit. Over a period of years we have become familiar with some of the constraints under which you operate at the Royal and this morning's site visit built on that because there were some areas of the hospital that we had not seen before and it gave the committee an appreciation of the background for the submission and the reason we need to consider the proposal today.

Peter, are you going to do the introductory process?

**Mr ALEXANDER** - I will give a short introduction but hopefully not take up too much of your time.

I think today is an especially good opportunity to give the committee an understanding of how we deliver our services because we have been to the Royal and we have been to Clarence. We always talk about care being provided across a continuum of services and locations and that allows us to look at how those interact.

One of the big changes in departmental structure over the last 12 months, and continuing, is the creation of area health services. For the last decade or more we have worked under a statewide functional structure and we have moved to three area health services which are meant to provide a benefit to the patients through more vertical integration of patient pathways. A lot of that is about trying to interact with patients earlier and keep them out of hospitals, and that is what we will be talking about later this afternoon.

That is an ongoing step in a process that I think this committee is very familiar with, where we have done a lot of refurbishments and rebuilding of our rural and regional facilities - and the committee will remember Campbell Town, Deloraine, Queenstown, George Town, Smithton, Sorell, Huonville, et cetera, where we have done that. They were the major key regional centres, and the department's focus now is both going out to the remote areas, and we have funding projects in various stages of progress at Bruny, Flinders and King islands, but the major focus is to look at the inner-urban areas. Tasmania's Health Plan gives a lot of rationale of how that works, so I will not go into that any further.

The other huge change for us has been the focus over the last two years on the proposal for a new Royal Hobart Hospital which got a lot of resourcing and investigation, a lot of which is still very useful to us in terms of demographics and developing models of care, and we will hear more about that this afternoon. But when the decision was made not to proceed with the Royal, it gave us a lot of work to do. In the background we had been looking at how we kept, in simple terms, the wheels on the existing Royal until the new Royal was meant to be delivered. What we have today is an expansion of that planning which was meant to be an interim solution until a new hospital came, but always thinking in the back of our minds that it might not happen or it might not happen in the time frames that the government of the day wanted.

As it happens we now have to do that for a longer period and we have to make the best of what we can on that site. We think in that context we can do that by refurbishment of that site, particularly in the key areas that the committee visited today, and being heavily supported by some of our off-site accommodation and new big clinical facilities in Clarence, and subsequently in Glenorchy and Kingston. That is an integrated approach which has included the organisation of the department in area health services and a much stronger connection between the acute hospitals, whose focus will be on that high end acute care and more community care going out into the suburbs and the regional areas, which is a benefit to the people who live there because they are not having to travel.

The work in the existing campus is absolutely crucial and some of the things we did not see today were some of the behind-the-scenes infrastructure projects, and that is essentially electricity supply, continuity of supply and upgrading of supply, hydraulic services and general maintenance and infrastructure issues which are needed to support that. They have to be taken in conjunction with this.

We also have the issue of dealing in an environment that has to operate continuously, so we do not have the luxury of being able to empty out large chunks of accommodation to do that. Essentially the approach has to be to start small and to drive a wedge in to get a bit of space and cumulatively get bigger and bigger chunks of space until in the coming years we have opportunities with the clinical school and with the Hobart Private Hospital perhaps to do major redevelopments on that site.

Today we are coming to the committee with a slightly different approach in that this is still an evolving work. Normally we like to present all the elevations of a fully-developed program. This is and will continue to be a work in progress - \$100 million is being provided over five years and we do not have the full answers of everything we need to do or where we can go into the future. We are bringing this in a preliminary stage.

Under the act, any stage of a project which is part of a bigger project, given that that stage may be under the threshold, has to be brought to the committee and we have a couple of specifics in today's presentation. So there is not the level of certainty about the detail of all the projects going into the future that we might normally have because we haven't had the designs done yet. But it is a well-thought-out program, which has the support of the clinicians and is affordable to the extent that it can be, and it will carry us into the future. Really, that is as far as I can take it.

**Mr PERVAN** - I will leave it to Julie to provide you with more detail, but just reflecting on what you saw today - not the worst parts of the hospital, but probably not the best either - the Royal on its current campus is not unlike most other teaching hospitals around Australia in that it has grown like a coral reef - it is a number of individual buildings that have been built over a long period of time, sewn together with passageways, as you will have noticed from having to walk up or down inclines, strange little corridors - and converted corridors in the case of the WACS waiting area - storerooms that have been turned into other things and an architecture that reflects its age. Julie pointed out that when large parts of the hospital were built, hospital beds were much narrower and the corridors reflect that. But as you saw in the new paediatric outpatients' clinic, the corridors are now much wider to accommodate contemporary beds.

The hospital largely also reflects having been built in an era before laptops and technology, in that we have multiple admin and reception areas and places that have been built around a paper records system and booking lists that were actually kept on pad and pencil. A lot of the things that we would do now, that we would address through technology and IT, were not available then, so what we have is a lot of duplicated administrative space where we could have clinical services.

One of the important issues to consider around the Royal and its capacity as a teaching hospital is the total capacity it has. Recently I was talking to a community forum and I was reflecting on my time in Western Australia, where there are three large teaching hospitals all within 15 kilometres of each other. When their emergency departments become full and they have ambulances ramped outside, they go on bypass. They say, 'We will not take any more patients until we have cleared the backlog.' The pressure is then transferred to the other two hospitals and they can actually rotate the demand during the course of the day on very busy days. The Royal does not have that luxury. In fact, increasingly the private emergency department struggles to retain emergency clinical staff, so a lot of that increased demand is coming into us. Similarly, with the numbers of GPs declining in southern Tasmania and the GP work force changing in its demographic and work practices, we are also seeing that compound the demands on the Royal. So what we have got is what we have got - that campus and its space is the piece of paper or the cloth that we have to cut, and we just have to cut it as carefully as we can.

Very quickly moving through what you saw today, that staff cafeteria is demonstrative of how many lives the campus has already had. We were sitting having a cup of coffee in what used to be the central store. Then at one period in time when the infill building was built, the then management decided that a central store would be a waste of money, they could spend the small budget they had on something else on the campus, so the central store was turned into a staff cafeteria and each ward was given a small store room. Now, with lifting equipment for bariatric patients, slings and a whole lot of other equipment - as you saw - which generally ends up in corridors, intravenous pumps, things that weren't around when those decisions were made, we now need a central store again.

One of the other issues raised by our catering manager was the new kitchen equipment that we are getting. Once again, that is reflective of the history of the Royal. They have been requesting new equipment for the kitchens for 10 years and there has always been a higher priority or we have always managed to patch what we have had. We now cannot repair the kitchen equipment we have, so we have had to buy new equipment, which

does not fit exactly into the spaces the old equipment was in. Hence, the challenge to try to reconfigure that space to accommodate the new equipment.

None of these issues are unusual in teaching hospitals across Australia - it is just that we are trying to deal with them in a planned, methodical way, as opposed to an ad hoc every-three-or-four-year cycle, as most other places we have been to around Australia have.

With medical imaging - that waiting area - you can imagine what it would be like for patients sitting next to someone who was acutely ill - perhaps vomiting or just generally very sick - particularly if the in-patient waiting area is full of people on beds. It is not adequate and it is not good for patient care or their experience.

With the ICU, space is certainly one issue, but of almost greater importance is the fact that it is bisected by two corridors - an enormous infection control risk and something that has become particularly relevant to us in an age where we are hyper-vigilant for VRE and other hospital-acquired infections. If we get an outbreak of that sort of condition in one ICU patient, with those corridors and those public access ways, it makes it very, very high risk for all the patients.

The cath lab - typical of the process we are going through. There is strong clinical engagement from round the consolidation of function. So we are not just looking to expand our bed capacity in the way we are doing things in this process, we are also looking at bringing functions together that have been spread across the campus as a result of decisions that may have been made 10 or 20 years ago.

The WAC service - this is something that is always going to tug at everyone's heartstrings. As you saw, that waiting area is literally a passageway. It is completely inadequate and in some respects it is beyond description. That was a short-term solution reached 10 years ago when, because of a financial crisis, we had to urgently vacate the Queen Alex. That was leased out and the WAC services were put there and configured there as a temporary decision, which became a long-term consequence. So we are looking to put right some of those things that were done - in some cases before most of us were actually working at the Royal.

This is also an opportunity to address needs that have not been addressed before, such as the paediatric and adolescent psych unit. As we heard from the paediatric staff and from Barb Renton, we have very limited space for patients like that and one of our senior psychiatrists said to me in relation to adolescent psych patients, 'It is not safe or appropriate to have them in the adult psych area and you don't want to put them in a ward with Winnie the Pooh on the walls.' It is not good for them; it is a second-rate service to provide them with. With this process we actually have the opportunity to do something that is good practice and what would be required practice anywhere else.

So we are using this as an opportunity to address many, many issues that have been at the Royal for a long time. One of the things I have been doing over the last few months is going through the previous reviews that we have had. Over 30 years there has been a consistent pattern of reviews of the entire hospital, identifying its inadequacies. Many of the reviews recommend a brand new hospital on a greenfield site. That has never been

financially attainable and so funds are sought by various governments - not any particular one - to build the infill building or the new B Block or D Block.

There have been decisions made to do what a government can do within its means to address an immediate need. Unfortunately, those plans, particularly with B Block, have never been made with the next step in mind. It has always been a case of 'what is the immediate need, and how can we fix it?' What we are looking to do with this process is set it up so that we are addressing all needs in a systematic way as we move around the campus and to set it up so that we can sustain good patient care at the Royal Hobart Hospital for the foreseeable future. I will hand over to Julie now just to put her position in context. While her title is Executive Director, Acute Operations, she is in effect our chief operating officer, who runs the day-to-day business of the entire hospital. She will be not only driving this process but also engaging with the clinical staff through the nursing services, directors and other staff who are all actively engaged in the planning.

**Ms VIECIELI** - I have a PowerPoint presentation here which will take us through each of the priority areas. I will just give an explanation of why we think we will get the greatest gain out of addressing these areas as our first priority group of works to be done.

The goal behind the identification of where we should spend the money best was around identifying areas that would give us the greatest increase in capacity for all our future demands, around building our capability, such as how we are able to do it, and with intelligence how we can be doing more, and also with a view to creating sustainability. These projects in themselves won't be the entire answer towards that sustainability or the capacity but they will go a long way towards addressing issues that we have now and in the immediate to medium term, and will be the foundation blocks for building towards that sustainability.

I think you have all read the documents so you will have an idea of which projects we have identified. I will go through each of them. With the endoscopy unit - we are actually tracking reasonably well with two endoscopy units until recently. We have a terrific bunch of clinicians, and they are working helter skelter and actually clearing a lot of our waiting lists. Then the national bowel screening program was announced and from that point on, with more people eligible for endoscopy treatments, our waiting lists have blown out. With that initiative, there is no way that we can meet that demand with only two endoscopy rooms.

The other issues are our actual floor layout and the GENSA standards, which outline clearly the processes that should be involved in the disinfection of the scrapes that we use for clinical service in this area. Currently, as you saw on the tour this morning, the processing room is completely insufficient and comes nowhere close to meeting those standards.

The third issue there is that as the technology is changing and is available to us now, we are actually not in a position where we can access that technology and increase or change the services we are offering without making changes to those rooms. We could be in a position with the changes that we are hoping to make to widen the scope of services that we can offer through those endoscopy rooms and do more interventional processes in those rooms as opposed to those procedures being done in the main theatre. Those

benefits to the patient are obvious because they can be done in day surgery cases, as opposed to needing three to four-day stays.

Those are the current limitations we have. We are looking at increasing the endoscopy suites by one. That will allow us to increase our activity by 30 per cent and would allow us to do an extra 2 000 procedures per year. We would also like to improve the technology in that area so that we can do more intervention work and this will take some of the workload away from our main theatres and potentially our ICU areas.

We obviously need to meet the GENSA standards. These are basic standards around infection control, so they are not standards that are aiming over and above basic infection control measures. We should be in a position where we can at least meet that baseline, which we are not currently in a position to do with our current layout.

**Mrs NAPIER** - And over what time frame?

**Ms VIECIELI** - Over this course of the project, that is the goal.

**Mrs NAPIER** - You said there would be a 30 per cent increase in productivity within -

**Ms VIECIELI** - Each 12 months with that extra endoscopy suite we will be able to increase productivity by 30 per cent over and above what we are currently doing.

**Mrs NAPIER** - And relative to your waiting list numbers and the length of time people might be waiting, are we going to run into a problem again in 2015 -

**Ms VIECIELI** - Yes, I believe that in time the third endoscopy room may not even be enough but it is what we can achieve now with our current funding and it would set us up for a period of around five to seven years. But as our population continues to age, and the patients have co-morbidities and rising bowel cancers, it certainly will not be enough further down the track.

**Mrs NAPIER** - In the context of the plan for that area, if we were to provide one additional suite - two suites in other words - later on, will it fit within the space that is currently being entertained?

**Ms VIECIELI** - The space is a limitation. What we are trying to do is recognise that we desperately need one more now. We will potentially need another one down the track and in our planning, in our design and spatial layout, we are trying to set ourselves up so that we can grow that additional endoscopy suite down the track without needing to completely redo that space.

**Mrs NAPIER** - That was where my question was going.

**Ms VIECIELI** - So we are very much aware of that and we are very fortunate in that the staff we have, whom you met today - Gail Sillery in the grey suit - is very experienced and so she is able to lead those design layout discussions so that we can build that consideration in to the future so we do not have to demolish the entire endoscopy suite in

seven years to add another room. So we are trying to work that through, recognising what we can do but what we will need in the future.

The day surgery theatres: in this area we have two day-surgery rooms and again that is not enough for our current needs. We are looking at building a third day-surgery room. The second part of this is our number of recovery rooms. You cannot have a day-procedure room without areas for patients to recover in. At the moment we do not have enough of those recovery room beds and our discharge lounge is completely inadequate. So it is the whole picture where we need to look at all of that. We are looking at building another day-surgery room and that will enable us to do between 1 800 and 2 100 extra cases a year, which would go a long way towards meeting our demand at the moment and would again allow us to meet that demand, probably between five to seven years into the future.

**Mrs NAPIER** - If there were to be demand, similar to the endoscopy, for the next 10 years after that and where further day surgery might be needed?

**Ms VIECIELI** - Day surgery is a little different to endoscopy because by definition you have to be pretty much street-fit for day surgery, unlike endoscopy, which means you have increasing co-morbidities. Although patients might have increasing co-morbidities, they still have to be street-fit to qualify for day surgery, otherwise they need to be an inpatient with extended periods of monitoring and observation after those procedures. So we will not see the exact same drivers behind the demand as we will for the endoscopy suite. What we will see though are changes in technology and surgical techniques which will mean that more surgical procedures can be done in a day-surgery model through laproscopic techniques and things like that. That would be the driver for day surgeries increasing demand.

Also because we have not had the growth capacity to increase the scheduling in our day surgery, that has in fact limited what the surgeons will attempt to do in day surgery because there is no more space for scheduling of additional lists. So they will still do procedures in the main theatres without a day-surgery model. I think once we get the third theatre, the surgeons then will have more opportunity to practise - not practise as in trial and error practise but practise as in administer their skills - day-surgery techniques. So our day-surgery rate is currently at around 65 per cent and I see our day-surgery rate through technology being able to increase up to around 70 to 75 per cent in the future. That will well and truly take up that capacity of the third day-surgery room, but that will take a lot longer to do.

**Mrs NAPIER** - Is that a national benchmark to be achieved?

**Ms VIECIELI** - It is through the Australian Day Surgery Association. We find that internationally the percentage of day surgery is increasing.

**Mrs NAPIER** - I think in the presentation it said that at one stage it was looked at as to whether day surgery could be done at a different site -

**Ms VIECIELI** - Yes.

**Mrs NAPIER** - but the decision was made to retain it on location, I think as much because of staffing issues?

**Ms VIECIELI** - That is one consideration, funds is another consideration, and that comes back to our design. We recognise that in the future we will need more endoscopy. In the future there will be an increased demand in day surgery. But if we can design it now so that in the future, if there is a decision to move day surgery into a free-standing site, we can still use what is left behind just to grow the endoscopy services. So we are looking at that in our design but we still have to meet our immediate need in the next five years with the funds we have available. So we are kind of setting ourselves up for this but also opening up the options for us, realistically, for the five years after that.

**Mrs NAPIER** - So the thought is that day surgery may well be developed on another site when dollars are available but, in between time, you are catering for demand in both of those areas?

**Ms VIECIELI** - Yes, without wasting the money. Again, the day surgeries, as you saw, are not compliant with the Australian sterilising service such as 4187. So, again, that will be addressed the same as endoscopy suites.

The 23-hour unit is an initiative the principles of which are based on removing inpatient demand from our current inpatient units and putting that demand in a space where it frees up those beds. At the moment our recovery areas do not lend themselves to a patient staying as an inpatient overnight - there are no ensuite facilities, there is no shower and there is no beverage bay. If we are going to revisit the recovery beds, there is an opportunity there for us by adding those other functions where, with scheduling in the day surgery, we can identify the specialities that we know have a one-day length of stay or one night and which specialities that we know are at risk at times of patients needing to stay in overnight.

I have worked at hospitals where we have introduced this and the benefits have been greater than we imagined. So the model will be that we will schedule each day. We will identify those patients and book a maximum number to stay in this unit overnight. At the moment, we are saying that we could use between eight and 10 patients. My experience is that, as soon as we put this model up, more and more surgeons will say, 'Hmm - okay'. At the moment they are a little bit hesitant but once it is seen to be working I think they will use it more and more.

So with our current projections being quite conservative, we can put through 2 500 cases a year in the 23-hour unit that will not be using up our inpatient beds. So in terms of our inpatient bed occupancy, we can free up between 2 per cent and 5 per cent occupancy by putting the patients elsewhere in a different model. When we are running it between 95 and 105 per cent occupancy, that 2 to 5 per cent really matters.

**Mrs NAPIER** - Where was that going to be developed?

**Ms VIECIELI** - In the recovery space.

**Mrs NAPIER** - In that recovery space that we had a look at which is the day-surgery area?



**Ms VIECIELI** - Not that recovery space but the new recovery space.

**Mrs NAPIER** - Is that a 10-year time frame?

**Ms VIECIELI** - I think it is very conservative. I think we will use that demand very quickly.

**Mrs NAPIER** - If it was successful - and you are saying it is not available currently?

**Ms VIECIELI** - No.

**Mrs NAPIER** - If you wanted to expand that, would you need to go to another site or would that be part of the alternative site operation or is there a thought to building it into your forward plan on location?

**Mr BURBURY** - There is a decision process that we are just beginning to research at the moment which is about the question of whether we extend B Block. Remember you are looking through, down onto the roof of B, so do we raise that two floors or can we wait until a new body of building comes on the bottom corner? In terms of Julie's time frame of five to seven years when we expect we will be in that decision mode where we can say, 'No, we can get through until we have a big block down the corner; or, if not, we will have to do something in B Block.' We do not expect the solutions that we are implementing at the moment to solve all of that problem right through to a 15-year period. We are expecting within that time we will have other planning options and so on. So what we are designing now is something that gets us through this intervening period with comfort and the kind of competence that it is in the right spot and we are doing stuff that can be expanded, so it does not reach a point of failure. It reaches a point where, when the \$100 million was identified for this project, it was recognised that it was not all that the hospital needed. So it is within that context.

**Mr ALEXANDER** - There will be a number of things that we expect to take off-site and things that can go out into clinics and not be done in the hospital at all - sub-acute, which is really pseudo aged care and people waiting for aged-care placements. We already have, I think, including palliative care, 66 beds at the Repatriation site. If we can expand that in another project, we need to get the breathing space in the Royal to continually expand the key services that need to be on that site and work very closely together. One of the points Julie is making is some of the services are very compatible and can achieve synergies from each other on that site.

**Ms VIECIELI** - The sites that we have seen so far relate directly to our surgical activity. That will enable us to build our capacity around our surgical interventions and procedures and removing some of the bed locks regarding that.

**Mrs NAPIER** - What do you think that will bring the bed occupancy rate down to?

**Ms VIECIELI** - That is in my summary sheet - can we leave that until later?

The women's health clinics - a lot of these services are spread across the hospital. Most of them are on level 3 but, as you can see, the spacing is quite deficient. As Mike

alluded to before, we moved across from the Queen Alexandra long before my time here. I think I recall a 60-bed allocation into an 18-bed allocated ward and since then demand has grown tremendously. That means our length of stay has shortened dramatically. This has flowed out into our women's health clinics because these are essentially our outpatients' departments for any gynae demands that women have. Most of the women we see are high-risk women with a lot of health co-morbidities. What that means is that the consultations take longer and the amount of investigations they need are more complex. The rooms are not family-friendly and they are not women-friendly. You often have five to six people in those consulting rooms by the time you have a medical officer, an obstetrician or a gynaecologist, medical student, assisting nurse and a support person - which women tend to take along - and the patient themselves. The facilities are very poorly laid out due to the lack of the space. In terms of hand washing and the examination, when you often have women needing to be on stretchers, it doesn't lend itself to either efficient examination or good infection control. We also have a lack of rooms, such as we had in the paediatric clinic, so what we have there are increasingly long waits in order to be seen by a specialist through these rooms.

What we are finding with the increasing co-morbidities and the fact that one-third of our pregnancies are teenagers, who are high risk, there are a lot of socioeconomic and drug and alcohol issues. We are not able to run the clinics that we need in order to best look after the demand. We have services that we could be running, such as maternal foetal medicine and complications of early pregnancy services, but we are simply unable to house because we don't have the room. We would like to address that by having an increased number of consulting rooms and have them at a size where we can allow the women and the staff some easier working conditions and better experiences during their consultation. We would like to have an increased number of rooms so that we can reduce the waiting areas. We can do that - we have a good training program, we have the registrars but we just don't have the consulting rooms. We would like to offer more of the tertiary services that, as a tertiary referral hospital, we are capable of but we are limited because we don't have the space.

There are two parts to the maternity unit: the in-patient unit and the pregnancy assessment centre. The pregnancy assessment centre speaks for itself. There is a space of 25 square metres with up to 70 women going through that space in any day. In that back room you would have at least six or seven women at any point in time; two of them will be on a stretcher, the rest are in chairs. Because we run addicts and high-risk women there are a lot of questions that need to be asked by medical nursing staff around what's happening with that woman's care throughout that pregnancy, what her history is. That is incredibly sensitive news - because they are high-risk women, what is happening with their baby needs to be shared with them. But there is absolutely no privacy in 25 square metres divided by seven women at any one point in time. Women in that space need to have their baby monitored, the heart beat measured and internal examinations. They are on a stretcher within that 25 square metres having an internal examination with a flimsy curtain separating them from five other women, and with the medical officers saying what they're going to be doing because they need to inform the patient and with everybody else in that room hearing. It is completely unacceptable.

We are currently running the maternity unit at 97 per cent occupancy. What this means is our length of stay is much shorter than our demographic need. We could argue that

the length of stay is quite right, but that is when we benchmark against other hospitals. Those other hospitals have four or five regional hospitals they decant their patients to once the immediate birth period is over. Women will be transferred to a regional hospital for another three- to four-day stay. We don't have that at the Royal. Our demographics are such that we have a reasonably high mix of high-risk women with drug and alcohol problems and that point in time in the hospital is their only chance to bond with the baby, to establish breast-feeding and to get used to the baby. When we shorten the length of stay in order to keep up with the demand, we are taking that opportunity away. As much as we can try to build community supports to help manage that risk and to ensure that the women still get support, we don't have that infrastructure in Tasmania and we don't have the midwives. The average age of our midwives is 50 and they're starting to reduce their hours; they don't want to work full-time any more, so that is a real challenge for us. To spread the services out across the community is not something that, realistically, we'll be doing very easily. We don't have enough single rooms as inpatient rooms and, as I mentioned during the tour, we don't have any isolation or negative pressure rooms.

Normally, when we staff the maternity patients, we will run on a nursing/patient ratio, depending on what is wrong with the woman or what part of their journey they're in. If they are birthing, there will be a midwife at times for that one patient otherwise we might work between two patients. Ordinarily the ratio will be 1:4 on a day shift. If we have to move patients out to another area of the hospital to be birthed or because they need antenatal admission, we have to deploy a midwife out to that space, which is pretty much one on one. In terms of pandemic and winter, that becomes quite challenging. During the last winter our sick leave was much higher than normal, almost double the rate of normal sick leave, so in terms of having enough midwives to cover the service is really challenging, let alone having midwives outreaching because we can't house negative pressure or isolation in our current maternity unit. That means that we end up using more double shifts, which again is a challenge when the average age is 50-plus.

The area is not family friendly. We have no stretcher beds built into those rooms for the support person to stay. So whether the support person is a partner or husband, it doesn't matter. In terms of finding support for those mothers, we aren't able to house them.

With the bed demand and the occupancy at 97 per cent, what happens is that we end up having to delay our inductions of labour or our caesarean sections on occasion. From a woman's perspective, when she's anticipating that this is the birth date of her child, she has geared everything up, all of the support is up, for that birthing time. When we delay that by two or three days, we have interrupted that whole psychological process where the woman is preparing for the birth, so we have fractured that journey for her. All the statistics will say that predisposes that woman to post-natal depression because she's not in control, she is not empowered, she hasn't progressed along the pathway that was anticipated. We are really challenging those women at that point.

**Mrs NAPIER** - So four extra beds?

**Ms VIECIELI** - No, we're not looking at four extra beds. That was early in the discussions but, unfortunately, there has been a bit of a lapse in that planning. When we were looking at the new Royal we did the modelling around what our bed demand was and

unfortunately those documents were not brought forward for these conversations in the revised context. The modelling shows that for our current demand, for us to be at around 85 per cent occupancy, which gives us that flex up and flex down and which is the place where the hospital is in a position to be efficient, we need an additional 12 to 17 beds for the maternity demand. That will allow us to travel through to 2013 on the modelling. If we hit 2013 and we are 85 per cent occupied, then we go into the space where we are starting to build that occupancy into the future, past that.

**Mrs NAPIER** - So what you are saying is that you immediately need an additional 12 beds?

**Ms VIECIELI** - That is what the modelling tells us, to bring our occupancy down to 85 per cent. That way, if we have women who do need to stay a bit longer for all the right reasons, we can do that. At the moment we do not have that option.

**Mrs NAPIER** - Where would that take you through to, five to seven years?

**Ms VIECIELI** - That would take us up to around 2013. After that we would be starting to eat into that occupancy -

**Mrs NAPIER** - The percentage occupancy would be going up?

**Ms VIECIELI** - Yes.

**Mrs NAPIER** - Can that be done within the space that is being envisaged?

**Ms VIECIELI** - Realistically that would probably buy us five years after that before we start getting into this really headachy space that we are currently in.

**Mrs NAPIER** - This document said four?

**Ms VIECIELI** - It did. In the infill building that we did not go to today, the neonatal-paediatric-intensive care building, was refurbished a couple of years ago. That has been quite successful. But in doing that redevelopment we were a bit constrained with space. One of the things that was sacrificed there was storage space. So that has been an ongoing problem for that unit because we have the transport ventilators in corridors. So, we thought if we are looking at level 3, we could just fix that deficit at that point and supply a little bit of storage space so the NPICU has that.

The major challenge for paediatrics is around not only its current occupancy but also the fact that we have no adolescent services provided. This service is not provided anywhere in Tasmania, let alone the Royal Hobart. So, because we are the tertiary referral centre, we have the opportunity to establish an adolescent service here. The Royal has commenced this in that we have funded the employment of a psychiatrist. We have funded the position for a psychologist and clinical nurse consultant for adolescent mental health. We advertised those latter two positions recently and were unsuccessful. So we are recruiting a headhunter to recruit those positions.

**Mrs NAPIER** - That was a child psychiatrist and a child psychologist?

**Ms VIECIELI** - Also a clinical nurse consultant in adolescent mental health. Currently when adolescents do need admission we try to get them into the paediatric ward but it is not anywhere nearly as successful as we would like it to be and often those adolescents are bedded elsewhere on the campus as inpatients. That is obviously not a good model. So what we would like to do is build the 10-bed adolescent area. The adolescent area will be for all adolescents including adolescent mental health patients.

The adolescent mental health patients form into two groups. One of those groups is those patients who have psychotic mental health illnesses and unfortunately there are quite a few of those and that number is growing. Those patients need secluded rooms so that they can create no self-harm and those rooms are stripped down and there is nothing there that they can hurt themselves with. It is not always appropriate that they socialise with the other adolescents in the acute stage of their illness, so they do need their own separate recreation room.

The other adolescent mental health patients often come with other co-morbidities, such as cystic fibrosis, eating disorders or diabetes. We need to normalise those patients as much as possible, so they need to be bedded in with the remainder of the adolescent unit while their other medical problems are addressed.

With the creation of the three positions, all of those other medical conditions do have those mental health needs. In addition to that, we also want to bring in our adolescent pregnancies because those young mums also have a number of psychological challenges ahead of them that they are experiencing at the time, so this mental health team will go across that. We are hoping that, with the 10-bed adolescent unit, we remove the patients from the adult areas, we do not have to bed them in with babies at times and that they can have a service that caters for their needs.

**Mrs NAPIER** - Initially I thought that the adolescent unit was to be for mental health patients but you are saying there will be other adolescents there.

**Ms VIECIELI** - Yes.

**Mrs NAPIER** - We have a separate section for adults who have mental issues because of the nature of the treatment and some of the issues and behaviours associated with it, which are usually noisier than you might otherwise expect on a ward. Why would we expect adolescents to be any different?

**Ms VIECIELI** - One of the challenges we have is that we have never had an adolescent service; we have never had an adolescent mental health service. At the moment, with the modelling that we have been able to do, we feel that a 10-bed unit is a good starting point. We have no data to work with at this time; we have our inpatient bed load and our inpatient useage but in terms of the mental health component, what we have is projections. We do not have a track history because we have not had a service and have not been able to admit the number of children who need admitting to have their mental health issues addressed. Those have been managed in a very ad hoc manner with the best of what was available. So we are not in a position to say - whether we are going to need 20 mental health adolescent beds - we do not know.

**Mr GREEN** - Is there a national guideline?

**Ms VIECIELI** - Reports were done in 2002 and 2006 that were tabled and again there has been the National Youth Mental Health Strategy. Those do not give us numbers but what they do say is that the mental health burden in adolescents will rise dramatically in the future.

**Mr GREEN** - I am talking about Mrs Napier's question specifically about the mix - the separation - what is the situation in other campuses?

**Ms VIECIELI** - In other campuses there are dedicated mental health services so there are equally dedicated adolescent services and we are not in a position with the funding at the moment to do both.

**Mrs NAPIER** - I agree with you, I think the current way that we deal with adolescent mental health issues is very ad hoc. To identify that there was a need for a greater capacity adolescent mental health unit, separate from adolescent health issues, are we going to be able to expand the space that is currently being identified?

**Ms VIECIELI** - It would be challenging on the fourth floor but there are opportunities there that we could explore. We are not building to the largest degree that we could at this time.

**Mrs NAPIER** - Is this again a five- to seven-year window for the adolescent unit?

**Ms VIECIELI** - I think we are just going to have establish it and wait and see how the demand goes and what the admission rates are like and how those 10 beds are used once they are up and running. If we find that 80 per cent are occupied with mental health, and that is only going to increase, then we need to be planning at that point for the future around that demand. But at this time we have no science behind the demand, we have heuristic knowledge and we have to listen to what the clinicians are saying. I suspect that the mental health demand will be much higher in the future.

**Mr GREEN** - With respect to the positions you tried to fill, did you have candidates?

**Ms VIECIELI** - We did, but they were not suitably qualified and they did not meet the selection criteria.

**Mrs NAPIER** - We observed that the siting of the adolescent unit is not proximate to the mental health unit and I would have thought that if you were to have an adolescent unit predominantly to do with mental health, you would have sited it near the mental health-PICU area.

**Ms VIECIELI** - All the models challenge that. They say that adolescent mental health should not be associated with adult mental health because the adolescents are quite vulnerable at that point and if they are co-located with an adult service, they are at much higher risk of inappropriate relationships being formed. All the research shows that they should be kept quite separate.

**Mrs NAPIER** - They should be physically separated?

**Ms VIECIELI** - Yes.

**Mr BURBURY** - Where we are looking to put it, on 3B, is immediately above the psychiatric unit. They share a special lift.

**Mrs NAPIER** - So there is a link?

**Mr BURBURY** - Yes. In fact, it doesn't look it but two storeys below is the full unit.

**Mr PERVAN** - A link for staff

**Mrs NAPIER** - It is really the staff I was thinking about in terms of the link.

**Mr PERVAN** - In terms of keeping them secure, the separation enables us to recognise their need for security and the vulnerable state they're in, as Julie detailed.

**Mrs NAPIER** - Within that, is it anticipated that the eating disorders clinic would be established?

**Ms VIECIELI** - Not within that, but the eating disorder patients that need to be admitted will be admitted into that unit. The clinics wouldn't run from that unit, they would run from outpatient clinics and paediatrics. The inpatients would certainly go there. We have a growing number of those. The provision of these 10 beds will allow patients who are currently in adult beds to be moved into a 10-bed unit. That would free up 2 per cent of our occupancy for additional adult use once we establish this 10-bed unit.

**Mrs NAPIER** - Just before we leave that, it seems to me there are quite a few changes around the women and children's area. I agree with you that it is quite cramped and so on. I know there is the issue of accessing that site on the south-east, but would it be preferable, if it was possible, to build a new building and get all the women's and children's areas to that new building rather than run this five- to seven-year interim plan?

**Ms VIECIELI** - We really looked at the concept of a new building when we were looking at the new Royal and a separate building for women and children. It was found that we would lose a lot of opportunity for efficiency in terms of radiology and all those other supporting services that we access. In the new Royal Hobart Hospital we had a designated area - one entire floor of a very large building - that was for women and children. That was seen to be the best compromise in terms of what women and children needed because they are two minority groups and they needed to be housed together to build up a bit more critical mass, and there would be benefits in that for them. Also, they weren't large enough to warrant an entire separate building for them either but having them all in one space was certainly of benefit. In our current location we don't have that opportunity. With a small group of clinicians we looked at whether we'd be better off leaving women and children but we brought it forward because it wasn't included initially in the south, in that five-to-seven bridging body of work that was to be between now and the new Royal Hobart Hospital.

We brought it forward into the priority works because of the space constraints, the high occupancy and because we are not going to make five years while we wait for a new building - not with 90 per cent occupancy of the maternity ward. We are already cancelling caesareans and delaying inductions and that pregnancy assessment service. We are not offering two or three services that we should be offering, given the fact that 80 per cent of our women are high risk. The actual time lines for maternity are done and, unlike adult surgical or medical patients, they are not a group of patients whom we can move around a number of other medical units. We can move a surgical patient around a couple of surgical wards, but with maternity patients who need obstetric care there is nowhere else we can put them. This is why we have put it up as a high-priority work because we are in a corner with this work.

**Mrs NAPIER** - If you were to move to deal with this issue - and I agree with you that it's a priority issue - you talked about the additional two storeys that could be built on B Block, is that a money thing that is stopping you doing that?

**Mr BURBURY** - In our planning process - and, as Peter said, we have only jumped into this recently - we have not satisfied ourselves that that is the next best step to take. Whether it is to build up on B Block or to build a new building on the Collins Street corner -

**Mrs NAPIER** - We don't need both?

**Mr BURBURY** - No, we will need both, it is just a matter of how long we can survive until we desperately need them. Given the money we have ourselves today, the money that we're immediately planning with, we can make some useful inroads into the problems that Julie has outlined there, but we can't solve them all - \$100 million just won't solve the new hospital problems.

**Mrs NAPIER** - Roughly what would it cost to put those extra two storeys on top of E Block?

**Mr BURBURY** - It would be a wild guess, so I am not really sure I want to launch into it. But it would take more than a third, I would have thought, of the \$100 million we have which means a lot of other people fall off. So we have to make a whole-of-hospital decision about whatever the cost of that exercise is and whether it is okay to let all of those other areas that we have not really brought to your attention today, fall off into a further delay of multiple years. We are not in a position to lay that problem out on the table, to be fair to all those things.

**Mr ALEXANDER** - The five- to seven-year time frame that we are talking about, does not mean that there will not be ongoing value in the works that we are doing. It just means that we will have to continue the process of getting more space and decanting and continuing to evolve as we go forward and we are designing the works we are doing so that they will continue to be useful but they will not meet all the demands for all the services. We will have to continually refine the level of service and provide additional capacity for some services and alternative solutions for other services.

**Mr HALL** - Can I ask a question on that last dot point on the proposed redesign? You are talking about increased revenue capture. Does that mean there is leakage at the moment?



**Ms VIECIELI** - That is in medical imagining, not the maternity service. So the business is quite different.

**Mrs NAPIER** - I just wonder whether it might be less costly to build a building, two storeys or something?

**Ms VIECIELI** - One of the things we are looking at is not repeating what has been done in the past, where we have limited funds so we do a little bit of this but we cannot do it all. Otherwise we are just extending the legacy into a future time. So what we are trying to do is recognise that we have this issue here and we can do this part of it very well and it will set us up for a significant chunk of time.

But if we look at the adolescent, that is a little bit of unknown quantity. If we find that in 10 years' time the maternity services continue to grow past that point and we know that the adolescent area is growing, we can extend the maternity services into that adolescent space. Then we will have enough. If it grows that much further than what we are predicting, we can separate our antenatal from our post-natals and we could put our antenatal in the adolescents and if the adolescent demand grows so high, we can separate that demand out and build that.

What we are trying to do here is not have a solution that is very narrow. We are trying to set this up and change some of the ways we have made decisions so that we can get more opportunity out of the choices we have now, so that it will open up options for us in that seven- to 10-year period. We do not close off options and then have to restart all over again because we are living with the consequences of that kind of thinking and I do not want repeat that. So I want the decisions that we make now to be such that we have options at the end of those decisions.

**Mrs NAPIER** - Thank you.

**Ms VIECIELI** - I turn now to medical imaging.

**Mr HALL** - You have increased revenue capture down the bottom. I suppose that was part of the justification of the redesign. Does that mean that you are getting leakage to other hospitals or whatever, at the moment?

**Ms VIECIELI** - No, with increased occasions of services and more services that we can offer, we can be billing for that and accessing a revenue stream that currently we are not doing.

**Mr HALL** - Are you saying those patients are not being treated at the moment or you're not getting the work done?

**Ms VIECIELI** - A bit of both. Some of it is that we are not doing as much work as we have the demand to do. Some of our internal systems are not as sharp as they could be and when we build extra capacity and when we sharpen up those business systems, we will be able to increase that revenue stream dramatically. They are the benefits we are looking at.

**Mrs NAPIER** - Is that about increasing the number of private patients being dealt with because of the nature of the facilities?

**Ms VIECIELI** - No, it is about how we bill - off Medicare and things like that.

**Mrs NAPIER** - Okay. Is that the lack of IT systems, presumably?

**Ms VIECIELI** - In part and also business processes. So one of the challenges we have here is being able to recruit staff to this area because it has not been a very attractive place of recruitment. We have been quite successful in recruiting our Director of Medical Imaging, Michael Carr. He has been a bit of a magnet - as we try to recruit other physicians in underneath him, we are now starting to attract world-class specialists into that area. I think the whole ethos of that unit will change dramatically and we will get onto a much stronger business footing. At the moment, and historically, we haven't had the ethos or the interest because we haven't had the leadership in that unit, but we certainly have it now.

Essentially our services have outgrown that unit; it is an old unit. We need a PET scanner and a new angiography suite. We don't have enough ultrasound capacity so we have more demands than we can meet. We haven't had enough staff to do the diagnostic work so that has created a backlog and delays in our diagnostics. What we have found when we have mapped our patient journey and length of stays with our medicine patients, because we have a lack of diagnostic capacity on weekends, some of our patients will have a two-day length of stay because they get none of that work-up or intervention or diagnostic work because we can't access the diagnostic equipment during the week. What we are looking at doing is getting us up to date, looking at our increasing our capacity in terms of the volumes that we can get through - and this will be quite important as our population ages and as those co-morbidities start to impact us more and more - looking at our angiography and doing a little bit more interventional work here, particularly vascular. We are also bringing that into our cath lab, more scanning and ultrasounding. That means that with the PET scanning and improved ultrasound we will be able to do more of our treatments here locally as opposed to sending patients interstate for what we need to do now.

**Mrs NAPIER** - There has been a bit of a debate about the PET scanner. Do we have a business plan that tells us what the net plus or minus might be of having a PET scanner operating there?

**Ms VIECIELI** - Clinically or financially?

**Mrs NAPIER** - Financially.

**Ms VIECIELI** - I haven't been privy to that information. Clinically, the benefits are significant in terms of diagnostic, the level of interventions we can do and the treatments we can do locally. Financially, my understanding - and this is not from this particular business case, but in general - is that with the PET scanner the number of patients we can do is dramatically increased, particularly with the technology of this particular PET scanner. It is out there on the cutting edge, so the number of cases that we can do is significant. In terms of the ongoing cost, because we can diagnose earlier and because

we don't have to transfer interstate, because we can do the interventions here and because we have the angiography suite and soon the cath lab, we will be able to do more interventional work as opposed to the main theatre work or inpatient day work. In terms of having patients in hospital, we will be able to reduce those costs significantly.

**Mr BURBURY** - I will just quote Michael Carr explaining to me that the PET scanner is also a CT scanner and in the afternoon it operates as a CT scanner. It is several generations at least beyond the one that was installed in the Hobart Private Hospital. It is quite a different machine.

**Mr PERVAN** - A draft business case is with the department at the moment. The benefits of the Royal having its own and having it integrated into our picture archiving system and our digital medical records are immense. Basically, a clinician with a few mouse clicks will be able to get up the patient's record, their PET scan, all their radiology and pathology tests. At the moment we can't integrate with the private scanner; it is a return to the old X-ray films on light boxes. Les is quite right, just in the last two years there have been three generational improvements in PET technology and the prices of the machines have halved. They have come down in price dramatically, thanks largely to the Japanese health system that refused to buy the machines unless the manufacturers halved their prices. In terms of the speed they take and how much of the radioactive isotope the patients require, there have been two massive leaps forward. It used to be an hour to do a full body PET scan - a large PET scan, with a considerable amount of isotope. We are now using a third of that amount of that radioactivity and we are doing it in 15 minutes. There are all sorts of technology around time of flight, which is the latest thing that all the clinicians are emphasising, but it all comes down to how long the patient has to lie still, how long it takes to get their scan done and how quickly we can integrate that imaging with other images so that we can identify the progress of their disease and what is happening with them.

One of the reasons why you need a combined PET-CT image is that the CT scans will give you an image of structure. A PET scan gives you metabolic process, so you can see how the tumours are growing and how they are interacting with the body. That is a very important type of image, moving forward.

Moving into the future, there is also the relationship with the Menzies when they purchase a cyclotron and start producing their own isotopes, both for research with the Royal and for clinical purposes. At the moment we would be flying a particular type of isotope FDG across Bass Strait in the morning and doing patients with that one. There are other types of isotope in use at Peter McCallum and other cancer centres that have even shorter half-lives but produce different sorts of images. So it just opens up a whole range of diagnostic work that we can do and enables us to keep more patients in Tasmania rather than sending them to the mainland.

While sending them to the mainland has, up until recently, cost us the cost of travel and accommodation for the patients, recent changes by the Commonwealth to the Medicare billing for PET-CT has meant that in the last couple of weeks I have just had my first bill from the Royal Prince Alfred for a PET scan.

**Mrs NAPIER** - They are starting to bill? There used to be an argument that it did not cost over there.

**Mr PERVAN** - They are starting to bill. It did not cost, up until the last month and we have just received our first bill, the same price as MIA currently charge. But, once again, it comes down to what exactly it is. Is that patient only being sent for a PET scan or they also going up for other tests?

So the benefits are quite substantial. The Medicare billing, particularly with the machine like the one we are looking at and the research relationship with the Menzies, makes it economically quite attractive for us to get into. It also comes back to cost, which is always a consideration in medicine of course, but the bigger consideration is how quickly and clinically efficiently we can get a patient through their diagnostic processes and get them on treatment or get them managed through their care. With a statewide radiology and imaging system - RIS/PACS - that is about to go out for tender as well, we are getting that all integrated into one IT system, as opposed to having to bring in bits and pieces and try to tack images onto it.

**Mr HALL** - Sorry, can I interrupt you there? Are you including the private service providers at the moment who do x-rays and all those things or is this just in the public system?

**Mr PERVAN** - I am just talking about the public system. But the RIS/PACS will be government owned and operated and for all sorts of security and virus protection reasons, we would not be able to open that up to all the private operators in Tasmania.

**Mr HALL** - As a general comment and being the devil's advocate here, we realise that medical technology and science increases on a daily basis and therefore the costs escalate and you painted a very bleak picture of Tasmanians and their health in this particular document here. Do you cooperate with the private system and x-ray clinics and that sort of thing to try to rationalise some of these costs? I know you have a charter to provide a public service but it would seem to me, as being devil's advocate and a taxpayer, do you do some of that?

**Mr PERVAN** - Absolutely. I do not want to participate in some of the politics around that. I would rather leave that to politicians. But we do have a very strong and, indeed, an excellent relationship with the private providers, particularly Calvary. There have been times - and I vividly remember this because it was a great Christmas day last year - when we had a number of machine failures at the RHH and our friends at MIA and at Calvary stepped in and enabled us to move public emergency patients to them for MRI, CT and any scans that we needed. I have always had a very good business relationship with the local director of MIA, particularly in preparing the arrangement for PET scanning next door - we work very closely with them. In addition to public patients, there is a large private patient demand out there and one of the things I am always very aware of when it comes to Hobart Private and Calvary is that their first duty to their board, to their shareholders, to whoever, is to provide private patient care. Legally that is what they are compelled to do so when they do help us out, it really is out of a feeling of collegiality, or something like that. They do help us out. There have been times when we have transferred patients to the ICU at Calvary when we have been full, when we have had

great need, and we have those relationships working very effectively on a daily basis. But primarily they do exist for private patients.

**Mr HALL** - The other regions of the State as well? I am moving away a little from this, but is there that cooperative approach?

**Mr PERVAN** - Absolutely, and increasingly so, particularly in the north in Launceston, where the Little Company of Mary's operations are looking at long-term collaboration and how they can mutually support each other.

When I talk about the capacity of the Tasmanian system, I am not just talking about the Royal, Clarence and our public health units, I am going all the way out to our neighbours, Hobart Private especially, Calvary, St Johns and St Anne's - any facility that is around. They have different drivers and different needs they have to meet but certainly they are all part of the equation.

**Mr HALL** - I am pleased to hear your response because we are a small State and with the bleak picture that is painted in your documents, I do not quite know how we are going to pay for it all.

**Mr PERVAN** - That is certainly what Julie is going through now. We know what we have to work with and we know what our modelling says that we are going to be confronted by. We are looking to be as smart as we can and use every single opportunity that we can to make the most of what we have to deliver the most care we can, whilst being financially responsible within \$100 million and what is in forward Estimates that we know about.

**Mrs NAPIER** - I do not know very much about it but I know that there has been \$50-plus million been potentially identified that Tasmania might be able to get from the Federal Government to do with improving the regional delivery of services for cancer patients. It is my understanding that there is a task force that consists predominantly of the Menzies, Royal Hobart, and there are a couple of people from the north on it -

**Mr PERVAN** - We are a task force - I like that.

**Mrs NAPIER** - Well, you meet.

*Laughter.*

**Mrs NAPIER** - I am just wondering how that fits in the context of the proposed changes that are being made in this area?

**Mr PERVAN** - Once again, the changes that we are putting forward are the money that we know we have, the demand that we know we have, and the opportunities that we have to make the most of that. What is left of the hospital and health infrastructure fund, which is what the opportunities to increase services for cancer patients is all about, is a discussion that is between the three area health services, the Menzies, the Department of Health and Human Services and a few other people, looking at the moment at putting in a bid for a regional cancer centre and of course as far as the Commonwealth is concerned, Tasmania is a single region.

**Mrs NAPIER** - I am not sure that Bryan would agree with that.

**Mr PERVAN** - I was very, very careful to say as far as Canberra are concerned.

**Mr GREEN** - I am trying to take a non-parochial approach to this.

**Mr PERVAN** - Don't worry, my very good friend John Kirwan beats me up about this frequently - in fact, in the last couple of hours. But as far as the Feds are concerned, we are a single region and they have nominated Hobart as the regional centre.

**Mrs NAPIER** - Who did?

**Mr PERVAN** - The Commonwealth Government. What we have to do now is put together a collaborative bid that while it might have an administrative centre in Hobart, delivers - if we can be successful in that bid - the necessary infrastructure to provide improved cancer services in the north-west and in the north - although they have done pretty well recently - and in the south as well.

**Mrs NAPIER** - No, they have huge waiting lists - I can personally attest to that.

**Mr PERVAN** - I know; we are talking a lot about that.

Once again, it is an interesting - I was going to say dilemma, but that is not quite the right word. As Julie points out, having reasonable facilities attracts the clinical staff and as you know, in the north they are a couple of medical oncology consultants down, in the south we are running at about half strength at the RHH, and there are issues in the north-west that collaboratively we are all trying to look after. We will not retain more staff until we can get the facilities for them to deliver a standard of care they want to. That doesn't mean we have to go for the flashiest, shiniest stuff in trying to compete with Peter McCallum or the big centres on the mainland, but it does have to be at least adequate and to contemporary standards like the paediatric outpatient clinic that you saw today, as opposed to what we have, which is something tacked on to A Block about 20 years ago.

**Mrs NAPIER** - So if there was additional money available, is it anticipated that you would do more in improved space allocation for these services?

**Mr PERVAN** - That would be around cancer services specifically. This doesn't capture cancer; cancer captures critical care, maternity and a lot of other issues. We haven't addressed cancer services specifically in this, and it doesn't include radiology.

**Mrs NAPIER** - Although it picks up the medical imaging associated with that.

**Mr PERVAN** - No, they are associated but not directly as far as that goes. It is very much around oncology services, so radiotherapy as opposed to imaging and medical oncology, chemotherapy and so on. That is an opportunity and we are getting very good at not letting a single opportunity pass us by at the moment.

**Mrs NAPIER** - I have a soft spot for the north-west on this one.

**Mr PERVAN** - So do I.

**Ms VIECIELI** - The Department of Critical Care Medicine is our intensive care unit and our high dependency unit. In our walking through there this morning you could see that the unit was around 30 years of age. It was previously designed as a coronary care unit and, again, our demand has outgrown that space. We have some structural constraints there which prevent us from expanding. One of the problems we have at the moment is that our demand for the intensive care beds is higher than we can currently provide. This current layout of the intensive care unit is quite squeezed together which, in the context of the decision-making in the past, was probably the best decision that could be made at that time. However, we have an opportunity here to do something about that. Our beds are incredibly close and modern standards would say that the beds there should be at least 5 metres apart, but I think if you recall this morning, intensive care beds are around 3 metres apart. In terms of infection control, that is a risk. In terms of the amount of equipment that we can fit in there and the technology we can access to support those patients, the space limits that. What we would like to do is look at our demand into the future. We recognise in looking at that that we can't possibly build 45 beds at the moment, nor would we be able to staff them. Looking at a narrower scope and not reaching out as far as 2021, but looking at a five- to seven-year period, we have looked at the envelope we have to work with and the space around it that we can play with and we feel that we can get an additional 12 beds. What we recognise is that, although in the very long term that's not going to meet our demand, we can expand the intensive care unit now, design it so that the beds can be used for intensive care beds or high dependency beds so that we have a bit more flexibility in that space, which we don't have at this point in time. Then, if the decision is made and the funding is available and we look at relocating the intensive care area to elsewhere on the campus, what we leave behind opens up a number of options for us. Which of those options we'll pick up we haven't decided yet. It is too early in the piece. What we do know is that we could designate that area for a coronary care area. We could run it as a high dependency unit which specialises in neurology or renal. There are options there for us into the future as to how we can use that space if we decide to build an intensive care unit to meet that future need in seven years' time. That is where we are looking at the moment. The current bed capacity simply limits our surgical activity, full stop. We are completely constrained by the lack of intensive care beds for our cardiothoracic patients

**Mr HALL** - How many are there at the moment?

**Ms VIECIELI** - At the moment there are 15.

**Mr HALL** - And how often would you exceed that quota?

**Ms VIECIELI** - Every month we exceed that quota.

**Mr HALL** - Where do they go?

**Ms VIECIELI** - They either go to Calvary or we cancel the surgery. Every month we cancel between four and six cases of surgery. A lot of that is cardiothoracic work because we cannot bed them in the intensive care unit. From the patient perspective, that is not good

- if you know you have a serious cardiac condition and you cannot have your theatre work done because there is no bed.

**Mrs NAPIER** - The theatres are in which block?

**Mr BURBURY** - In D Block. It is the one in the middle, wedged between the lot of them.

**Mrs NAPIER** - Is it preferable to have your ICU near your theatres?

**Ms VIECIELI** - It is preferable to have them within close proximity. That term is quite relative though. We need to remember that because, in the larger metropolitan hospitals, like the one I come from - the Mater in Brisbane - our theatre suite was on one floor, quite extensive with 20 theatres, and our intensive care area was on another floor. That is quite reasonable. It really comes down to the traffic pathways for that. If you have designated pathways that are only for that traffic, that facilitates the intensive care -

**Mrs NAPIER** - Otherwise there is the risk of cross-infection or whatever?

**Ms VIECIELI** - You cannot really have patients travelling from theatre to an intensive care area that is also a public thoroughfare. Your travelling time is just going to be held up - too slow. You have a bed with monitoring equipment on it with drains.

**Mrs NAPIER** - Does it work as it is currently configured?

**Ms VIECIELI** - At the moment it does work but there are challenges. We just do not have enough beds.

**Mrs NAPIER** - I think you seem to be suggesting that the ICU may well be part of whether it is the top of B or the new F?

**Ms VIECIELI** - Yes and they are options for us down the track and we have not decided those decisions yet. So, at the moment, we are trying assess -

**Mrs NAPIER** - This would give you five to seven years?

**Ms VIECIELI** - That is right. Those decisions, certainly we can look at the clinical need and how we can use that space. But, then again, that will be influenced by other things such as how much funding we have to explore those ideas further.

The other thing that we are well aware of is that the technologies will change within the next seven to 10 years as well. So we do not want to make decisions now that are going to close off accessing those technologies and bringing them into something new that we will build. So we want to look at those and see where it is going into the future.

You saw the lack of storage space and we have spoken about the infection control issues. We had some issues recently around that, where it really did impact on our service delivery. At one point we had to close a unit. So the fact that it has a public thoroughfare through it is almost unheard of. But we have one and that is influencing our decision around the cath lab and we certainly need to close that corridor. In an



intensive care area, where you have your most unwell, there is a public corridor through the middle of it.

The central coordination unit: this is an interesting little unit because, on the face of it, it looks like a much softer priority than some of the hard-core clinical demands. But this unit is quite central to our function and our bed access issues and our patient flow issues. So it is made up of a number of different functions that you can read there. A component of this work is that transit lounge. This transit lounge is pivotal to accessing beds into the future. So what we would like to do is set ourselves up for success. At the moment we discharge between 40 and 45 patients a day. So, historically -

**Mrs NAPIER** - That was that downstairs area was it, the last one we went through?

**Ms VIECIELI** - It is on the ground floor, which would be the perfect location for it. What want to do is have support persons or ambulances being able to easily access that transit lounge. So ground floor is best for that, so that they can pull in, go into the lounge, collect their loved ones, put them in the car and take them home with ease of access into that unit. If we have it up on the fourth floor or seventh floor or ninth floor, that becomes logistically much harder.

So with the 40 to 45 patients that we discharge a day, those beds account for around 9 per cent of our bed occupancy each day. Culture and practice has been that when a patient is ready for discharge, they will stay in those beds waiting for their partners or support persons to finish work for the day and then they will pop in and pick them up. So that is an entire day that a patient is occupying a bed that we cannot access for a surgical patient, we cannot transfer a patient from the emergency department into that bed because this patient, who is clinically fit for discharge, is sitting there quite comfortably using that bed.

What we would like to do is have the transit lounge. Once patients are ready on the ward to be discharged they will be transferred to that lounge. It will be staffed by two nurses and it will have a shower and toilet facilities. It will have a beverage bay so that they can get cups of tea and coffee. It will have recliner beds -

**Mrs NAPIER** - I was going to say you wouldn't put them in some of those little chairs you had around the place.

**Ms VIECIELI** - and the capacity for beds so that we can decant from the inpatient areas to the transit lounge so that we can access those beds much earlier in the day.

The other users of this area will be discharging from the 23-hour unit. The protocols will be that the patients in the 23-hour unit would be transferred to the transit lounge at around 7 a.m. every morning so that they can be collected there. They can have a shower and be served breakfast in the transit lounge so that we have those beds free for the day activity.

**Mrs NAPIER** - How much bed blockage did you say that it was currently associated with?

**Ms VIECIELI** - We could have earlier access to 9 per cent of our beds each day.

For the floor metreage and the amount of infrastructure, it is quite a small cost for that whopping 9 per cent benefit.

**Mrs NAPIER** - I don't have to argue to get rid of that heritage building after all?

**Ms VIECIELI** - I am not sure what needs to be argued.

**Mr PERVAN** - Which heritage building? We have a lot!

**Mrs NAPIER** - C building.

**Mr ALEXANDER** - It is a good use for that space, which isn't particularly good for clinical use. I think that is symptomatic of the entire program - we're doing the best with what we have across the board. But if we could have a nice brand new one instead, we would look at that.

**Ms VIECIELI** - In terms of the activity through the emergency department, we know that come half past 10, 11 o'clock, the numbers of presentations are starting to climb and of course one-third of whatever we see in presentations through the emergency department usually routinely fall into admissions. So whether it be 100 patients or 150, the stats seem to work out that at least one-third need to be admitted. So by half past 10, 11 o'clock, we are trying to bring in the patients that need to be admitted and that goes on throughout the day. If we have not been able to transfer those patients into beds by early evening, it is quite congested and that is when the ramping of the ambulances starts, because they're blocked in the cubicles.

**Mrs NAPIER** - I remember when we approved the new Department of Emergency Medicine, there was a short-stay unit that was supposed to be developed as part of that.

**Ms VIECIELI** - And it has been.

**Mrs NAPIER** - This report said that it - paraphrasing - 'hadn't been working as well because of staffing issues'. How do we think that the 23-hour unit will operate better than the current short -

**Ms VIECIELI** - Completely different staffing requirements. To staff the emergency short-stay unit in the Emergency Department there are medical and nursing staff. The 23-hour unit, depending on the ratios, will need two nurses - a registered nurse and an enrolled nurse - it will not need medical staff. It is essentially an inpatient unit but only running for 12 hours a day, at night time. We have already got staff there by day, so we just need to put two staff on for night duty to access patients being able to stay there.

**Mrs NAPIER** - So you think you would be able to staff that one. Are you still going to run that short-stay unit?

**Ms VIECIELI** - It is running.

**Mrs NAPIER** - So you are still trying to run it.

**Mr PERVAN** - If you have a look of the incidents of ambulance ramping at the Royal over the past 12 months, in particular, you can see two dramatic falls. It has been coming down consistently for a year but there are two dramatic falls, and you can actually peg those to the opening of the short-stay unit and the opening of the MAPU - the Medical Assessment and Planning Unit - and the dramatic difference they have made of the speed at which we have been able to move people through the Emergency Department and either into beds or homes.

We have over the past year found ways to staff the short-stay unit. That was very challenging through winter because we had up to 20 per cent of our ED staff on sick leave. They require very specific skills to keep that unit running effectively. It runs effectively because of the skills of the staff and because of the very targeted selection of patients to go through there. They are 24-hour-stay-only patients, so it is not just used as an observation ward - one of those other figures that we hear about a lot in the media. It is very much around someone who needs a 24-hour stay in hospital and then goes straight home.

**Ms VIECIELI** - With the other functions involved in the central coordination unit, we would like them not to be dispersed across the campus. We would like them consolidated into one area. We believe that that will facilitate communication between those different functions and that communication is directly around patient flow, making sure that all the teams are working together around finding solutions and problem solving on a day-to-day basis. It is kind of like me trying to work with my admin assistant down on the ground floor when I am on the ninth floor; even though we have e-mail, it is just not the same. That is what this team is trying to do. This team is one of the core groups for success in patient flows and them being housed together will add a lot of synergy and efficiency to the communication that is required in moving patients through their journey on a day-to-day basis, from one end of the campus to where they need to be at the end of that day. Certainly having them together will improve that communication and the time limits of problem solving.

This hasn't been listed as a priority as such but it is important to mention now that we are on the ground floor that there is an issue regarding our customer service centre and the front-of-house function with reception. We are going to park that and table it for inclusion. It is not a clinical priority area, but it impacts on the services we give our customers because we can't meet that with our current front-of-house function.

**Mrs NAPIER** - Is it within the \$100 million?

**Ms VIECIELI** - We are going to wait and see on that.

**Mr ALEXANDER** - It is within the margin of error.

**Ms VIECIELI** - We just want to park it there so that there are no surprises.

As Mike alluded to earlier, we did have a central equipment store but that position was undone. What we have found in the meantime is that we have individual clinical ward areas and they have their own individual processes for ordering equipment. Nurses are

fabulous at hoarding equipment because they don't want to be without that hoist when they need it, so they will hide the hoist in the back corner of the ward. Another ward might need a hoist to lift a patient, finding out which wards have a hoist - you have to be in the hospital for a while to know all those sorts of secrets. What we find is that we have bits of equipment lying everywhere across the campus without a library system of use of that equipment so we are missing opportunities in terms of working out what equipment we need to buy. We are not maintaining the equipment as we should be doing, we are not accessing the equipment as easily as we could be so what we will be doing is looking at establishing a central equipment store. We have done a full business case on this. I have worked at a hospital where we have established this and we have had a bit of a travelling tour and seen the benefits. With the central equipment store, we would like to establish it so that there is an area for receiving equipment that is, say, dirty. The equipment is cleaned, dismantled where it needs to be recalibrated and set up so that it is fit for use again, and put into the storeroom with a tracking system so that we know where the equipment has gone and so that we can measure what the requests are for particular pieces of equipment which will inform our procurement of equipment.

We can also look at standardising equipment across the campus. We have a number of different pumps for different medications; we have a number of different types of mattresses and wheelchairs. We need to standardise those so that we can get better benefits out of contracting. We need to standardise our service agreements around that equipment procurement and the maintenance and servicing of that and all of those things will be the function of the central equipment store. In terms of risk management, I think it offers us better risk management financially and better clinical risk management because the equipment is well maintained. It allows the clinicians more predictable access to the equipment, which again impacts on safety. We have looked at some of the savings we can make by looking at our mattresses and whatnot and with the standardisation of equipment and with better tracking, we were in a position where we could access \$1 million to \$1.5 million worth of savings. I think that is quite conservative. I think once we get it running and we get more practice at running a central equipment store with some really sound business processes underpinning it we will improve those savings.

With the cath lab, Tony Bell gave his history to that this morning. So the equipment in the cath lab was due for replacement about now. We had a problem with our intensive care area. We had an infection outbreak in that space and when we looked at that and revisited the fact that the corridor through the intensive care area which leads to the cath lab, is our main point of access, it gave good enough reason for us to rethink the decision of simply refurbishing the cath lab as it is currently located in the Hobart Private Hospital. That was a pretty tough decision because we had made some financial commitment to that space. In that window of time, the decision not to have the new Royal Hobart Hospital was announced and so, in that space, we had a perfect opportunity to challenge that decision.

Once we revisited it with a different context in mind - that we are not moving to a new site, that this is our site - then the decision needed to be changed. So we engaged with the cardiologists. They were quite reluctant and nervous about cancelling the refurbishment of the cath lab because the equipment in the existing cath lab is quite old and they were very much looking forward to having some new equipment with new

technology and clearer visibility. But in a great leap of faith they have agreed to stopping the previous decision and allowing an alternative decision to be made.

When the previous cath lab was designed, maybe it met the standards then and maybe it did not, but they certainly do not need the functional requirements now. We cannot have a scrub area with cleaning equipment in the same space.

**Mrs NAPIER** - Would that be 15 years old?

**Ms VIECIELI** - Yes. There are some real issues there, which you can read.

We also have changing demographic needs. We have an ageing population and we all know that they are going to have more co-morbidities and cardiovascular concerns are right up there with the new predominant co-morbidities that we are looking at. So in revisiting the decision it was decided that we would relocate the cath lab elsewhere into the Royal Hobart Hospital and locate it such that we could completely change the model of care. Historically, our cath lab has been used only for cardiac work, whereas, we can use that for cardiac and vascular work, as is done elsewhere.

We have put up that we will have two cath labs because we think that will be what our demand is and if we incorporate vascular work, between the vascular work that we can do in the cath lab and the vascular work we can do in medical imaging, we are well positioned for that future demand without overinvestment.

Our preferred location is on level 4, close to our theatre suite because, as we do more interventional work, which has not historically been done here because the equipment and technology has not allowed the accuracy and the visibility, with new equipment we will be able to position ourselves so we can undertake greater levels of interventional work. Being located next to a theatre suite is the safest location for those patients in the case of an adverse event happening.

**Mrs NAPIER** - So that will take us on 12- to 14-year projections?

**Ms VIECIELI** - Cath labs are usually projected to last between seven and 10 years. So I suggest this one would probably not last any longer than that in terms of the technology because we have already bought the equipment for the first cath lab. We have not bought the equipment for the second. Possibly the equipment we buy for the second would last us past that 10-year time frame, but the technology that has already been purchased for the first cath lab probably will not get us past the 10-year time frame.

**Mrs NAPIER** - Two cath labs would accommodate the 50 per cent increase in procedures?

**Mr BURBURY** - I can add a bit on the cath lab question. I am happy to table these documents and I want to stress that they are a work in progress. The reason I want to bring them to your attention is that we are advertising this weekend to get a short list of builders capable of doing this sort of quite specialist work. That short-listing will occur parallel to the detailed design and consultation with this lab. You can see how we have managed, with great care, to get them to connect into the existing theatres. It is the first sign of external activity in terms of appointing builders to the project.

**Mr ALEXANDER** - The builders won't be appointed and the work undertaken until the outcome of this process. A lot of what we are doing here is trying to be smarter about what we do and that extends into our contracting as well. We want to develop some relationships and prequalify a small group of builders so that when we get the approvals and finish the design we can move quickly into the building process rather than then go through an extended tender process that lasts another couple of months.

**Mr BURBURY** - The time opportunity we are looking for is that little gap after Christmas. If we are able to get a builder swinging his hammer and doing the messy stuff in that relatively quiet period of the theatres so that it is sealed up and cleaned, then the equipment installer can step in, in late February through to March, while the theatres are ramping back up. It is highly time-critical not only for all the clinical reasons but also because we need to get those parts to put together very carefully.

**Mrs NAPIER** - Does that reduce the number of theatres we have in the system?

**Mr BURBURY** - No. We went very close to that and we were quite worried but we found a design that avoids doing this.

**Mrs NAPIER** - I think this suggests that it would reduce -

**Mr BURBURY** - Yes, it was. When we were writing that, that was the risk.

**Mrs NAPIER** - So we are still going to have 10 theatres?

**Mr BURBURY** - Nine. We have managed to preserve all the theatres.

**Ms VIECIELI** - In planning for the new Royal and, again in this new context, we have looked at opportunities to consolidate the acute services on the existing Royal Hobart Hospital campus and looked for opportunities where we could move non-acute services away from the Royal to make way for more acute services as the demand grows. In that space we have looked at the Repatriation building and looked at opportunities to move some of our non-acute outpatient clinics. Lorraine Miller and Les are working closely in looking at how they can do that. We will be looking at moving our rehabilitation and some of our non-acute aged care up to the Repat building. With the space that is decanted in the ward that is currently known as Dwyer, that will make a ward available for our acute aged care. We often have aged people who come in who have acute dementia or an acute health episode but they're not chronic or aged-care needing nursing home placements. That is not their primary clinical concern. I wanted to put that table so that you have an awareness of context. The clinics are important because in order to commence some of the work around these priority projects we will need to decant acute space so that we can construct in that site. That is the work that Les is trying to coordinate now.

**Mrs NAPIER** - I might have misread this, but I got the impression that you are going to be bringing some people who are currently bedded at the Repat into the Royal Hobart Hospital, as well as moving some people out of the Royal Hobart Hospital up to the Repat.

**Ms VIECIELI** - It is more back the other way. I am not aware of any patients at the Repat that we are bringing here.

**Mrs NAPIER** - So I got the wrong message?

**Mr BURBURY** - Where we might have confused that pictures is that what we are trying to do at the Repat is also increase some low-level diagnostic services - a little bit of X-ray and pathology - to stop people having to be carted up and down. I reckon that is where the conversation comes from.

**Mrs NAPIER** - I got the impression you were going to put them down at the Royal Hobart Hospital so you didn't have to transport them.

**Mr BURBURY** - No. At the moment we trot up there with ambulances and bring them down for procedures which can be done quite easily up there.

**Mrs NAPIER** - That makes a hell of a lot more sense. I am reassured. It must have been nightmare.

**Mr BURBURY** - This strange diagram on 22, that is almost incomprehensible, but it is showing -

**Mrs NAPIER** - I would not try that one - it's too difficult.

**Mr BURBURY** - It is talking about how they have managed over many years to settle into a booking system that fits about 40 different clinics into two fairly small clinical spaces and still make it work - and they still managed to squeeze other people in small time. We have quite a planning exercise to work out how we pick some of those out of that system without making it extremely inefficient and how those can be moved off-site, up to the Repat or a centre like that. That connects in with the discussion we had with the women's and children's services where we need to pick to clinics out of the women's and children area to allow that area to expand to bring them down into the space occupied by these people. So there is quite a lot of very careful planning that is going to take a month or two to figure out - to move those we can up there and move the other ones who have to stay on the acute site down into another space to allow those acute areas to expand as they need to.

**Mrs NAPIER** - The document says, 'dedicated acute rehab' and my notes say, 'dedicated acute rehab and geriatric sub-acute floor will be constructed.' Is that going to be constructed at the Repat or at the Royal Hobart?

**Mr BURBURY** - No. Separate to this, there is what is called the Dwyer ward within the existing acute site, which is -

**Ms VIECIELI** - A rehabilitation ward.

**Mr BURBURY** - Yes.

**Mrs NAPIER** - That is going up?

**Mr BURBURY** - No, that will largely stay down there but it -

**Ms VIECIELI** - The long-term rehab will go.

**Mr BURBURY** - Yes. So they are two separate things. Because of the nature of the patients - they are there for a period of time and they do a lot of physio and other activities around them - they do not fit well into the ward where they located at the moment. So that discussion was about finding a better space where we can spread them out and where we can genuinely rehabilitate them actively and help teach them to work in kitchens and all sorts of physical movements. At the moment we are struggling. So it is a somewhat parallel debate. I hope I have explained that adequately.

**Mrs NAPIER** - So we are going to try to move the long-term rehab up to the Repat or make sure that -

**Mr BURBURY** - No, it is more sub-acute.

**Mrs NAPIER** - Yes, sub-acute. So are we building a new section to increase the capacity for that?

**Mr ALEXANDER** - At the Repat?

**Mrs NAPIER** - Yes.

**Mr ALEXANDER** - We did put a funding submission in the Government's Capital Investment Program for that after the demographic work that was done in Tasmania's Health Plan because it is obviously an increasing area. It is not funded at the moment.

**Mrs NAPIER** - What would it cost?

**Mr ALEXANDER** - It is very hard to say. The two wards that we put into the Peacock building, which we again shoehorned into an existing building, were remarkably cheap. We spent \$1 million on one, which got us 20-odd beds, and nearly \$2 million on another. But then because we have done up the majority of the building, we had to do up a lot of the background services and that is lot of diminishing returns. To convert any more space at the Repat, we would be better to start with a modern building rather than try to go back and use what was the Statton building, for instance, which is just inherently inefficient.

**Mrs NAPIER** - Is there space up at the Repat for more buildings?

**Mr ALEXANDER** - We would have to take out the Statton building which is an old hospital building which we are currently using for a range of services, most of which operate in the aged care area, continence services and some other visiting community nursing services, who sometimes visit on-site and then carry a carer back into the community with people. So we are using the site - and I had to answer a question on it other day - we have 240 staff based there, providing other services. There are 18 non-government



organisations there and we have something like 66 beds. But it is a site that has re-evolved opportunistically and what we would like to do is have it as a proper support facility.

There is a different model in Hobart from that in Launceston. The district hospitals, particularly George Town, Scottsdale and Campbell Town, have quite an official ability for the Launceston General, where we can take people back to the community with a low level of medical care, but are not the same level of what we used to call district hospitals in and around Hobart. There is one at New Norfolk and there are very few other beds around.

**Mrs NAPIER** - Huonville?

**Mr ALEXANDER** - At Huonville we have a community health centre and there is a private aged care facility but we do not have any bed capacity there.

**Mrs NAPIER** - We do not know what it would cost us to build another 20 there?

**Mr ALEXANDER** - No. We would have to knock down an existing building and start again.

**Mrs NAPIER** - A new building.

**CHAIR** - I am awfully tempted to rein in this discussion because whilst that is part of the decanting process as part of this submission, we are ranging out a bit wider than the consideration of this project, so if we can just refocus.

**Ms VIECIELI** - In summary, looking at the service delivery outcomes, if we break it down to areas of capacity and capability in works towards our sustainability, with the priority works that we have looked at, we have identified that if we were to go ahead with this, we would increase the Royal Hobart's capacity to do procedures by at least 8 000 procedures a year, and they would be split across the cath lab, endoscopy, day-surgery unit - looking at the 23-hour unit.

By moving patients into different models, we would access 15 per cent of our current bed occupancy. So that would be freed up and we would have that 15 per cent where currently we are sitting anywhere between 90 per cent and 106 per cent occupied. So that would bring that occupancy down, which would make us sit where hospitals should be sitting, at somewhere around 85 per cent occupancy, to be as effective as they need to be. It does not take us back as far as we would like but it does get us away from this highly occupied edge that we are in and it does buy us a buffer while we do more work to create status sustainability.

We will also be able to access increased occasions of service for our medical imaging, our women's health clinics, as mentioned here, plus the non-acute clinics that Les is working on elsewhere. With our capability we will have the savings that we can make through the central equipment store, we will have increased standardisation of equipment, so we will be able to do the management of our equipment much more intelligently. We will actually have increased capability in terms of the quality of service

we have because we will be compliant with the standards. With that comes the management of risks associated with being in breach of those standards and we will also have much more capability in terms of our diagnostics and the technologies we can use for interventions.

In terms of sustainability - these areas, and the enabling strategies work towards establishing the Royal Hobart Hospital campus as an acute-care service base. It also initiates the establishment of a non-acute service centre.

**Mrs NAPIER** - Sorry, what kind of centre?

**Ms VIECIELI** - Non-acute - in the rehab. It also enables us to have capacity with the changes in where we place the occupancy for growth for that five- to 10-year period of time, depending on which service we are talking about, and it dramatically improves our bed access and patient flow.

**CHAIR** - Thanks very much Julie. There have been plenty of questions along the way, which I think have been productive. Any further questions based on the comprehensive presentation by Julie?

**Mrs NAPIER** - In terms of service delivery outcomes, one of the things that came up was accommodating teaching space. Some of those areas we saw were pretty squeezey if you load into it the teaching space as well as other aspects of service delivery. How is that being built into, if you like, the space allocation that might be provided for consulting rooms, theatres, whatever facility you are devising?

**Ms VIECIELI** - What we are seeing with the paediatric enhancement program, when we have established those new clinics, we actually have an additional number of clinic rooms. So when you have a registrar and a staff specialist working in side-by-side rooms, we can accommodate that now. So from a training perspective, we are not doubling them up in the one room and that works. We would be looking at mirroring what we have been able to achieve with the paediatric program into the women's clinics. As Les works through relocating the other clinics to decant the non-acute, that quality of building and facility would also support that training.

**Mrs NAPIER** - But you are going to give them bigger rooms?

**Ms VIECIELI** - It is not just bigger rooms - it is also more rooms, so we actually can have places where the registrars can work.

**Mr ALEXANDER** - They are bigger rooms than the current rooms. Across the nation, and Tasmania is part of that, we are developing national health facility guidelines in a joint venture with the University of New South Wales. That is looking at not just clinical spaces but all the spaces within hospitals and trying to establish benchmark sizes, which lets poor builders like us not be bullied by clinicians who just want it bigger and better, but put some history behind that. Some of the hospital administrators are against it because they are thinking that the guidelines are taking the room sizes too large, but they are larger for a number of reasons. Today we have seen there is a lot more technology in rooms, a lot more machines and things that go with it. There is a much more open

attitude to having support persons and family members in rooms than there was 20 or 30 years ago. There are also more teaching requirements. That is something we are carrying through all our facilities now. We have to make room sizes large enough so that if a clinician comes in with maybe one, two or three students, they can be accommodated. Those things have been taken into account across the nation and developed into room sizes, circulation spaces and all the other support services, so there is some science behind that.

**Mrs NAPIER** - There is a reference under 4.3.3 about the leasing of nearby sites. I guess that is part of the decanting issue, but there is a reference in a couple of places about bridges, connections, which has been around for 20 years or so, as an option. What work is being done to identify whether nearby sites are available for decanting and/or the development of alternative clinic sites and clinical office space et cetera?

**Mr ALEXANDER** - It is more than decanting space. When we did the work for the new Royal we were talking about needing 95 000 square metres of space and the current site gives us 66 000 square metres, with the potential to get back a couple of buildings that are occupied by others in a decade or sometime within the decade. We have a great need for additional space, we have need for a space until we can maybe build something really big and we have different forms of operation. We are going out again - it is request for information rather than a tender-type process - to see what we can get a developer to build close to us, preferably. There is an option that has been put to us that could be connected to the hospital with an air bridge. What we would want that to do is be available for clinic space, and the Building Code of Australia limits what we can do in different places. If it is built as an office block we can't necessarily put clinics in there. One of the reasons for that is fire evacuation. If you have someone who is less than 100 per cent - in other words, they can't leap off the bed and run out of the building - we need to have better fire evacuation processes and that is something that is built into the building. You can have fireproof lifts, for instance. We are looking at a couple of options there. There are a couple of developers who are very interested in helping us with that.

**Mrs NAPIER** - But no leases have been arranged yet?

**Mr ALEXANDER** - No leases have been arranged yet. We have been approached by two property owners and developers who own property that is only a street away, across the street. For probity reasons et cetera we are going to open that up to the market for a short time.

**Mrs NAPIER** - Would you have an open expression of interest?

**Mr ALEXANDER** - It is a request for information in the first instance, which goes to the investment community and says, 'Can you offer us a deal?' and we will short-list people. There is a range of issues. One of the proposals that have been put to us is fine except that the floor levels are half a floor out, so an air bridge would have to have a bit of a slope on it or we'd have to come up with another way of doing it. There are always problems but 6 000-8 000 square metres, given that the planning we have done says we need 30 000 square metres, we can be quite confident that we can very valuably use

6 000 or 8 000 square metres. We also need to get some free space in order to get the builders into the existing campus.

**Mrs NAPIER** - As part of your decanting process?

**Mr ALEXANDER** - Yes. If we can get, for instance, groups of day clinics into another building where they are easily accessible and can be managed and then reorganise some of the other things so that we get a contiguous chunk of space that we can work in.

**Mrs NAPIER** - What is your time frame on being able to advertise something like that?

**Mr ALEXANDER** - I have it on my desk and it will be in the paper Saturday next week. There is at least one proposal from a private operator that could be delivered by Christmas 2011.

**Ms VIECIELI** - I think your point about training is quite important and space is one component of that. There are other components, culture and all that sort of thing. But technology is certainly another. There is an initiative at the moment called the regional digital initiative.

**Mr PERVAN** - Digital regions.

**Ms VIECIELI** - Yes, and accessing funding from that will also support that training requirement as well. An example of that is like in our theatre suites. Currently we do not have that technology. But if we can access that funding, then that comes back and we can have monitors on our pendants and in theatres and that would enable us to have a fully digital integrated theatre. So we can have the trainee and the registrar on one side, as they currently are, but currently their view is limited and they do not have enough visibility. They have enough visibility but it is not as good as it could possibly be.

I have worked in theatres where you have these digital integrated theatres and the monitors and just like those Plasma or LCD screens. They are absolutely massive and that is what the surgeons are looking at through the cameras attached to their instrumentation. The visibility is just outstanding. So in terms of the learning tool that supports that training, accessing all those digital technologies will be really great too. Certainly having that technology in our hospital puts us right up there in that leading space. So we would become quite competitive at that point.

I can remember working with Geoff Askin, who is one of Brisbane's leading spinal surgeons, and looking at him doing some spinal work. We had this massive monitor and the visibility was just outstanding. There are three monitors in a digital integrated theatre. You are able to look up on the wall and see that surgical side. The surgeon has a monitor that he is looking at. Behind him is a monitor that his assistant is looking at and integrated into that is an eight-second delay to anywhere in the world, so that you have another world leading surgeon giving you advice on what you are doing. That becomes quite an attraction in terms of training.

**Mrs NAPIER** - So you are intending to look to building that in?

**Ms VIECIELI** - Yes, we have put submission in for that sort of technology. For orthopaedic work and for vascular work, it is just sensational.

**Mrs NAPIER** - Coming back to interim SAMP, presumably that was to be able to get you through to the point in time at which the new greenfield site was going to be built. How much of a difference is the plan that you are currently doing now from that interim SAMP?

**Mr ALEXANDER** - I guess it was a blessing in disguise that we did not have all the money and the resources because the focus was on the new Royal because it has forced the Royal to be very smart and very intelligent about how they could do things. Until earlier this year that was on the basis of, as I said at the outset, keeping the wheels on the existing building. Les has done a lot of planning work and it has really been an expansion of that. But it was really well informed by, as Julie has shown, a lot of intelligent thinking about increasing capacity, mapping patient flows. So the rationale is very rigorous and very robust. This will not give us a final solution. Nothing in a hospital will ever give you a final solution. But it will carry us through for the best part of a decade, supported by things like the suburban clinics and some other things. Other practices - and you mentioned renal this morning where there are very high levels of home dialysis and things like that - also have patient advantages. It is much easier for the patient.

**Mrs NAPIER** - Would the committee be able to have a copy of the old interim SAMP report?

**Mr ALEXANDER** - Yes, certainly.

**Mr BURBURY** - You must have already read a fair bit of it as it happens, but there is not a problem there.

**Mrs NAPIER** - I think what you are doing makes a lot of sense, to have an overall plan of what you can do and where you are going. It makes a lot of sense to me, it really does, rather than doing one-off things that you might eventually have to unpick. In the Repat, can we get more Federal funding for Repat sub-acute?

**Mr ALEXANDER** - The Repat is only Repat by name.

**Mr PERVAN** - It is a particular type - except for transition care, which is a very specific Commonwealth-funded program.

**Mrs NAPIER** - Are there any more Federal funds around?

**Mr PERVAN** - My understanding is that the minister has written to her Federal counterpart a couple of times and we have not had a very positive response yet.

**Mrs NAPIER** - We need 20 up in the north as well.

**Mr PERVAN** - You do.

**Mrs NAPIER** - The budget, on page 44, it seems to me you're saying that the series of the next four budgets there is a shortfall of \$25 000 overall but the timing didn't necessarily look right. What is that line above that starts with '\$750 000' et cetera? Can you walk me through that?

**Mr BURBURY** - It should be \$11 750 000.

**Mrs NAPIER** - I tried doing a bit of addition this morning and I couldn't make head or tail of it.

**Mr BURBURY** - It is \$11 million we are expecting to spend this year. The bottom line is money that the Treasury has indicatively allocated to us.

**Mrs NAPIER** - So they are new allocations each year? That is a cumulative line, isn't it?

**Mr BURBURY** - Yes, that's right. There needs to be another \$25 million added on to the right-hand side of that in a further year, which is not on this table.

**Mrs NAPIER** - So both of those lines are cumulative lines?

**Mr BURBURY** - Yes. I have noted in there that we have not attempted to precisely match our projected cash flow. The reason for that is that the interim SAMP which was done in November, and which we will send you a copy of, the costings for that were derived from a quantity surveyor undertaking estimates of the time. The context and thinking has changed enough that we are getting projects re-costed at the moment. Until we have come back with an updated cost for all of the big projects we are talking about today, it is an academic exercise to adjust those cash flows. We felt it better to put some numbers on the paper because it makes you make a conscious decision when you decide to not spend on something but to spend on something else. They are very much provisional numbers at this stage. They will sharpen up considerably over the next couple of months.

**Mrs NAPIER** - Just to make sure I have it right, you are saying in the budget this year there is \$11 million that has been allocated and in 2010-11 there is \$6.5 million been allocated, which gives you a cumulative rollover target of \$17.5 million?

**Mr BURBURY** - No, in 2010-11 there is \$17.5 million.

**Mrs NAPIER** - And in the next year they provide you with 20.5 million new dollars?

**Mr BURBURY** - Yes, that's right.

**Mrs NAPIER** - So in the last line there, is that the cumulative one?

**Mr BURBURY** - The last line, the \$75 million, is the adding up of those preceding four years. There should be another \$25 million in there. It is to do with the government forecast three years -

**Mrs NAPIER** - So if I put the total at the end, that makes sense.

**Mr BURBURY** - We're not depicting this is the final budget; we are just putting the numbers on the table as we understand them at the moment.

**Mr ALEXANDER** - It would be fair to say that the Government gave us an amount of money with very imperfect information, just recognising from the work that they understood through the planning work for the new Royal that there were a number of projects that had to progress. We are trying to balance the available funding with the high priority work.

**Mrs NAPIER** - So it would be fair to say we have put off a fair bit of maintenance and projects thinking that there was a chance of a new site?

**Mr PERVAN** - Since 1988. In 1988 a report that was done and the decision was taken we would have a new hospital so we wouldn't do the interim works then.

**Mrs NAPIER** - How much would have been spent on maintenance at the Royal over the last five years? Say, an annual figure.

**Mr PERVAN** - An annual figure would be somewhere in the order of \$2 million. That is for everything - plant and equipment, light bulbs everything, as well as contracted maintenance and things like that.

**Mrs NAPIER** - And the estimated value of the building?

**Mr ALEXANDER** - It is very hard. I talk to my colleagues interstate about valuing hospitals and it depends whether it is a replacement value or an operating going concern-type value. Certainly they have a pretty poor record for selling once they are empty. So they are really ongoing issues, but that is minimal. Again, it's very hard to find benchmarks because hospitals have different levels of capacity and different levels of technology and different ages, but something like 4-5 per cent of your annual operating cost is the type of figure that's used for maintenance budgets - and that's not what we have.

**Mrs NAPIER** - What would you have - 0.4 per cent?

**Mr PERVAN** - No. The problem is that there isn't a discrete line item for maintenance because of the Honeywell contract and other things that are funded. In a very good year it would be in the order of \$5 million, but then all it takes is for half a dozen air-conditioning chillers to blow up or the master ring cable, the main electrical feed, to have a hissy fit, as it does these days - after all, it is 60 years old - and you're looking instantly at \$50 000 to \$100 000 just disappearing. A circuit breaker on the master ring cable - just a part about that big - is \$25 000.

**Mr ALEXANDER** - We're looking to spend somewhere around \$800 000 on the ring cable. We're spending \$1 million on fire services in the current year. We are doing what is not yet specified on hydraulic upgrades - just the whole water pipes, water pressure, and the lack of reliability in those. Over the last 10 years there has been a maintenance contract where the contractor has carried the performance responsibilities for some of

infrastructure. We're changing that so we'll take that back, basically because, if he carries the responsibility, we pay him whether he does it or not or whether he needs to buy parts or not. We want to hold the money and carry the risk and will only buy the parts when we need them.

**Mrs NAPIER** - On page 42, you have given us a time line as to some things that might be possible in terms of the long-term plan. I wonder if we need to get it on the record in terms of access to building F, given that is one option identified in terms of an initial new building that sits over E and F, as I read it? We dealt with the issue of whether it would have been better to build a new building and then fix up the rest of it because at least you are decanting some options. What is the difficulty in getting access to those buildings?

**Mr BURBURY** - We are starting a discussion now with UTas in terms of establishing the functions that will have to stay on that site and those discussions will need to proceed on the basis that they will form part of the brief.

**Mrs NAPIER** - That includes the nursing training?

**Mr BURBURY** - Yes, that's right. They're not an alien body, they're a body that needs to be there and has a legitimate claim, just as we have other claims. I am saying that in a generous way. So we will need to understand what of their functions need to stay there and the nurse education and all those things which need to stay there, or in close proximity, and build that into the planning for the exercise.

**Mr ALEXANDER** - There is a whole-of-government approach to the university, including the Conservatorium of Music, the nursing school and Domain House and other waterfront issues and the marine and Antarctic centre. So what we have finally been able to do is get a whole-of-government approach to the university which may allow us to do some horse-trading and, as the Health department, we are in there trying to manage what we get out of that.

**Mrs NAPIER** - But are you saying that's a few years off?

**Mr ALEXANDER** - I'm saying we have recently been able to get a whole-of-government approach to talk to the university.

**Mrs NAPIER** - I guess that has been brought on because of the decision there?

**Mr ALEXANDER** - Yes.

**Mr PERVAN** - The other issue, of course, and I think you have -

**Mrs NAPIER** - Hobart Private?

**Mr PERVAN** - No, I would not mention Hobart Private.

**Mrs NAPIER** - He's here.

**Mr PERVAN** - I know, but their CEO in Melbourne is scary.

**PUBLIC WORKS, HOBART 24/9/09 - ROYAL HOBART HOSPITAL  
REDEVELOPMENT PROGRAM (VIECIELI/BURBURY/ALEXANDER/  
PERVAN)**



The map that you have has two red cylinder-shaped objects on it, for hyperbaric and medical gases. That is the other issue: if we knock down where the university currently occupies we have to find somewhere else to put the medical gases and a 35-tonne hyperbaric chamber, which won't be easily moved because it's at the foot of that building. I'm not exactly sure where else on campus we could put it while we're demolishing and building a new structure. But certainly all the medical gases are there and reticulated throughout the site from that location, so that in itself is quite a major undertaking.

I know that the secretary of the department's view is that we should not start there, we should start with H Block - which, as Tony Bell told us all this morning, was voted Australia's worst public building three years running - and to move everything out of H block and demolish that and start in that corner. I think when the time comes we'll just have to decide what makes the most sense, where to start, what's the best opportunity. It might be E and F blocks, it might be H Block, it might be C Block.

**Mrs NAPIER** - We spent some time, given the significance of the issue, talking about the fact that sometimes you decide you don't want to retain heritage buildings because there is a greater good.

**Mr PERVAN** - Yes, and there may be issues with the deteriorating fabric of the building. I know from personal experience, not with C Block but with the King Edward Memorial Hospital in Western Australia. It is of a similar age to C Block, it has some wonderful art deco features about it, but every time there is talk about redeveloping it, a few hundred midwives come out of retirement and hug the hospital for the media. The fabric of the building is now deteriorating to the point where it is not just an issue of refurbishing it.

**Mr GREEN** - It's all the hugging!

**Mr PERVAN** - Too much hugging. So there might come a time when, as much as we might like to keep C Block because of its architectural significance, it's just not able to be restored, refurbished or maintained.

**Mr GREEN** - I couldn't believe that you couldn't even cantilever out of the front or anything.

**Mrs NAPIER** - You could knock the back off and just keep the front facade.

**Mr ALEXANDER** - We're not allowed to cover it.

The sort of issue again in the background is that the slab thickness in the floors doesn't meet current requirements for fire separation, so we can't use it for clinical space. We can use it for other space because we can prove that we can get the people out before the floors actually get hot, and that's a different approach to the Building Code, but we're continually coming against these issues we've inherited from previous generations.

**Mrs NAPIER** - Would it be fair to say, though, just for the record, that whilst I entertain the idea of knocking the back off it and just keeping the front facade, it's not actually a big space that it would open up.

**Mr BURBURY** - No, it's not a big space and it always has to be a corridor. It inherently has to be the link, east and west, to the campus, and there is just too much concrete there to move in our foreseeable future. It will always be a limited thing. You could knock it down and make it better and more efficient, give it more width, but there will always be a limit to what you can do with it.

**Mrs NAPIER** - Have the financial logistics of demolishing H Block been looked at?

**Mr PERVAN** - Not at this time.

**Mrs NAPIER** - Because a number of these improvements are happening to H.

**Mr PERVAN** - That being said, we have made those improvements and those suggestions cognisant of the fact that that is five to 10 years and that in forward estimates there isn't an amount of money in the foreseeable future that would enable us to replace H Block, because that is a \$400 million-\$500 million project. I am basing that on square metres and \$10 000 per square metre, which is the number that bureaucrats like me like to throw around for building a hospital 'thing'.

**Mr ALEXANDER** - Many years ago I used to build roads and it's much easier to build a new road in a paddock and leave the traffic on the old road, and it's not only more efficient, it's also a lot cheaper. There comes a time with the refurbishment of buildings, too, where the cost of refurbishing and working around what is an existing environment and the actual cost of trying to bring it up to standard when you have basic issues like floor-to-ceiling heights that are incorrect, and the fact that you never get the spatial efficiencies and the energy efficiencies, you really do need to start again. That's where the costs just skyrocket, and that was really the rationale behind a greenfield site.

**CHAIR** - I think I have been fairly lenient with all that because that is for another day. It really does not fit strictly within the project we are considering here today but I have allowed some leniency because of the significance of the development.

Thank you very much. We will have Peter stay at the table and have the changing of the guard. We appreciate your time.

**THE WITNESSES WITHDREW.**

**Ms SALLY WILLIAMS**, PROJECT MANAGER, CLARENCE ICC; **Mr GREG COOPER**, MANAGER, MAJOR PROJECTS, DEPARTMENT OF HEALTH AND HUMAN SERVICES AND **Mr ANDREW GRIMSDALE**, ARCHITECT WITH DESIGNINC, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

**CHAIR** - We, of course, have had this submission for a little while and committee members have had the opportunity to familiarise themselves with the content. The site visit has familiarised each of us with the site.

**Mr ALEXANDER** - The integrated care centres are a new concept and Sally's role as project manager is the establishment of the integrated care centre concept, which is broader than the building works and includes the staffing and service mix and those things. Greg, who works in my group, is responsible for the building.

**Ms WILLIAMS** - We would like to lead you through what is an integrated care centre and what is a GP super clinic because Clarence, as you know, is a little different from the other integrated care centres because it does have the GP super clinic. Greg will talk to you about the building response, building configuration and ESD initiatives.

We are looking at redeveloping the existing Clarence Community Health Centre site as an integrated care centre and we have \$18.5 million available for the capital redevelopment. The project, as you know, is jointly funded by both the Tasmanian and Australian governments and the Commonwealth's contribution is in the form of the GP super clinic, which is \$5.5 million.

Most of you would be aware that the health plan identified the establishment of integrated care centres in major population centres around the State. The first of those to be developed will be Clarence and Launceston.

**Mrs NAPIER** - So they are State-funded?

**Ms WILLIAMS** - The Launceston centre is jointly funded.

**Mr ALEXANDER** - It is essentially federally funded. I think it might have \$15 million of Federal funding and \$3 million of State funding in Launceston.

**Ms WILLIAMS** - The idea behind the Clarence integrated care centre is that it will help to take some of the pressure off the Royal Hobart Hospital's acute services and that it will also provide integrated services across the primary care system and in particular across general practice. The Clarence site also offers a real opportunity to improve training and research for medical nursing and other allied health providers in a partnership with the University of Tasmania. That is in recognition of the changing face of medicine, training opportunities and the opportunity to link those professions together in training. So Clarence ICC really has the opportunity to provide a cornerstone for primary care. As an integrated tier 3 facility it will have that acute service provision as well.

So what is an integrated care centre? Integrated care centres provide a range of health services in a community setting which are obviously needs based. So there will be

different services in each integrated care centre. It will provide services at the local level for people with complex health conditions that may have previously had to travel to hospital. It will enable the effective management of chronic health conditions - diabetes and heart disease are obvious chronic conditions - and it will help early identification of relapses and complications.

The Clarence integrated care centre will address a range of gaps in services but it will not address all community needs. Will it provide in-patient care? No, it is not an overnight facility. It is purely an ambulatory facility. So the services that will expand into Clarence will be of an ambulatory nature.

Clarence will provide access to GP services in the way that it currently does, but it will be through the GP super clinic. It will provide a range of other primary health care services, for example dental services and allied health.

**Mrs NAPIER** - How many GPs are there now?

**Ms WILLIAMS** - About four FTEs. That can be up to about 12 people, very part-time.

It will facilitate access to mental health services, which are going to relocate into the centre. It will provide a centre for clinical education and general practice training in partnership with the University of Tasmania and increase capacity for primary health care research.

**Mrs NAPIER** - You said that the reason there is a publicly funded GP service over there can be traced back to the when the bridge went down.

**Ms WILLIAMS** - It is historical.

**Mrs NAPIER** - Do other regions say, 'Why not me too?'

**Ms WILLIAMS** - Certainly other general practices in the area say, 'Why does it still exist?', particularly as it loses a lot of money. If it was put into the hands of a private provider or a not-for-profit organisation we would expect it to be able to generate revenue in a way that it doesn't now.

**Mrs NAPIER** - Do we know what it costs and how much it loses?

**Ms WILLIAMS** - Yes. We know that it loses about \$800 000 a year.

**Mr ALEXANDER** - We do provide support for GP services in other areas. We have a current example in Zeehan where we will be contracting a private GP provider but we are working with council to provide the premises to attract someone there because it is a remote area. I guess when the bridge came down the Eastern shore was seen as a remote area.

**Ms WILLIAMS** - It is fair to say that the Clarence Community Health Centre does service a difficult client group, which means that consultations are longer, but we think there are ways that a private provider would possibly manage that better.

In terms of the integrated care centre and the types of hospitalisation we are looking at avoiding, these include diabetes, chronic obstructive pulmonary disease, and ischemic heart disease. Dehydration and gastroenteritis can be treated in an ICC, and soft tissue infections, asthma and leg ulcers. They are all things that people now present to the Royal but if we had the right services in Clarence they may not need to.

When we have been consulting around the services we might include in the integrated care centre we can categorise them under four major headings: primary care services, which includes community health and nursing; complex and chronic conditions; specialist clinics; and education and healthy lifestyle programs. In terms of primary care services, we consulted quite broadly, particularly with general practitioners in the area, around the sorts of services we might provide. It will be a GP super clinic with a minor injuries service. Allied health services will be offered out of the GP super clinic and they may be private providers. In the primary care setting we will still have oral health services but they will be expanded to adult oral health services. Community nursing services will continue.

Youth health service provision has been identified by Clarence City Council as being a significant area of demand in that area and they would like to see that incorporated into the general practice. They are prepared to put some resourcing into that by way of a youth health worker.

With complex and chronic condition services, some of these services could be nurse and allied health led. Diabetes, cardiopulmonary and muscular-skeletal and pain management are services that have been identified across the southern area as services of demand that really should be put into Clarence. That is borne out by the client demographic there now. Mental health services, as we said, will be relocated. Incontinent services are currently really only available from the repatriation centre and we realise that it would be of real benefit to have a base at Clarence as well. These services are going to be supported by a rehabilitation gym.

As to specialist clinics, we are in discussion with the Royal at the moment. They have just started to operate antenatal services those out of Clarence now. Diabetes - obviously - respiratory, cardiac and renal are possibilities. Wound care is a definite and aged care is a definite. Those specialist clinics will expand over time. We have included in the design of the building space for meeting rooms to run antenatal classes, smoking cessation programs, fit-for-surgery programs and healthy lifestyle classes. We are also working with the Chronic Disease Prevention Alliance for them to run self-management programs out of the building.

**Mrs NAPIER** - I was looking at the spaces you have allocated there. As with the Kings Meadows Health Centre, they run a lot of fit-for-surgery programs, anti-fall programs and fitness programs, there didn't seem to be a space big enough to handle, say, a group of 20 people with a fitball.

**Ms WILLIAMS** - In the centre now?

**Mrs NAPIER** - Yes.

**Ms WILLIAMS** - I think you're right.

**Mrs NAPIER** - And even in the new centre I couldn't see it.

**Mr COOPER** - There is. The upper level is where we have all the meeting room group programs. We have about six meeting rooms there.

**Mrs NAPIER** - Are they big enough for an exercise class?

**Mr COOPER** - Yes, we have two sizes of rooms. There are four or five which are about 30-40 square metres and then a couple of larger ones which are up to 60 square metres.

**Mrs NAPIER** - The biggest area, which I thought might be quite useful, has education and research in it.

**Ms WILLIAMS** - The sorts of factors we were taking into account when we were planning were things such as new technologies which will enable different approaches to care. One of the real limitations at Clarence now is that each service has their own individual client records, so Allied Health Services keep their own, the medical practice keeps its own, and nursing keep their own. In building a new building which is purpose-built we will be able to access the Royal Hobart Hospital digital medical record, we'll be able to align the systems and people will be able to have a single health record and talk in real time, which is going to be quite important if we're looking at transferring some of our acute services into Clarence.

Obviously there are a lot of new ways of delivering services, and chronic disease management is a good example of that - hospital in the home. People are looking to avoid hospitalisation wherever possible, as are we, because of the costs involved. There is a real increase in demand for outpatient services. We have looked at the ageing population profile of Clarence, which has the highest proportion of people aged over 65 in the State, and there is also a very high proportion of high-dependency clients in Clarence. There are also real work force challenges with all of this and we're looking at ways to reconfigure our current work force and how we look at our new service models.

**Mrs NAPIER** - So will this make it easier or more difficult to maintain the work force?

**Ms WILLIAMS** - I think there are a lot of new opportunities that will be presented for the current work force in terms of working in a team dynamic with the chronic disease service. Working in the ambulatory care service offers a real upskilling opportunity for some of our nurses.

**Mrs NAPIER** - So it's positive?

**Ms WILLIAMS** - Yes, I think it is positive.

Just a little bit about the GP superclinics. There has been a lot of conversation about the Commonwealth-funded GP superclinics and what they're all about. It was really important in developing this superclinic in Clarence and within the ICC that we could assure general practitioners in the area that it wasn't going to be in competition with other general practice and that we would try to add value to their existing practice. Part of the work that I was doing was talking to them about what we could incorporate into this

general practice that might be of value to them. The minor injury service was the obvious one but, in addition to that, we're thinking along the lines of allied health staff that this general practice might contract or employ who can be subcontracted out to smaller practices that can't afford to take on their own full-time.

So it was really about working with general practitioners in neighbouring municipalities and asking, 'What would be of benefit to you?' This will also be a teaching practice, not just for medical student undergraduates but also for registrars, and we're hoping that consultants might do sessions in this GP superclinic so that general practitioners from neighbouring practices might be able to partake and/or have their clients seen within that setting. So we're trying to look at all those opportunities to see how we can make it worthwhile to them rather than being something that is set up in competition with them - and also that assurance that any clients that were seen in the general practice of the clinic would be referred back to their own practice.

**Mrs NAPIER** - Tricky.

**Ms WILLIAMS** - Yes, it has been quite tricky. Interestingly, one of the neighbouring general practitioners who came along to several sessions and had been quite opposed, said, 'You know, I'd actually consider coming and working here after hours if they decide to extend the hours, if you set it up in this way.' So there are opportunities there for them; it's about working with them to find what they are.

So how is the integrated care centre model different to the current community health centre? It will have a much stronger focus on chronic disease management. The current community health centre, like all primary care services, does focus on chronic disease management, but the integrated care centre is trying to target clients at that middle level; as I said to you this morning, somewhere between the acute and the very primary care, the clients who currently slip through the gaps. It will be able to provide some clinical services that have been traditionally delivered in hospitals, like IV therapy and complex wound management. It will facilitate better communication and transfer of clinical information because it will be purpose-built and will have that infrastructure built into it. A new building will offer us a better layout and we will have new governance arrangements, so the general practice will be moving from within government to being external to government.

**Mrs NAPIER** - What does that mean?

**Ms WILLIAMS** - What that means is that the department will not be running the GP superclinic. What we are doing at the moment is going through a process with an advisory group to work out how we might place the general practice outside of government. Part of the Commonwealth requirement was that they would give us the money to build the GP superclinic but they do not want the State to run it, so now we are looking at how we might engage an external provider or set up a board external to government to run such a facility. That's the process we're currently going through.

**Mrs NAPIER** - So would that apply to the whole facility?

**Ms WILLIAMS** - No. The integrated care centre is a State-run facility, the building will be operated by the State, and the GP superclinic will be a tenant of the building.

**Mrs NAPIER** - So it will be under a lease arrangement?

**Ms WILLIAMS** - That's right.

**Mr GREEN** - That's handy - they built it for \$5.5 million and we lease it to them.

**Ms WILLIAMS** - Well, it's a good amount of money to provide a purpose-built facility, so it's a wonderful opportunity really. I might just hand over to Greg to talk about time lines.

**Mrs NAPIER** - I noticed that one of the pods you referred to has physiotherapy, child and family in your documentation, and also when we had a look at the building, there was a wing that had child and family, speech pathology, OT, social worker, parenting, and I did not see a psychologist. Is it anticipated that that range of services would continue under this model?

**Ms WILLIAMS** - That's right.

**Mrs NAPIER** - How do we see this relating to the development of children and family centres which also propose to have child health services, speech pathology, OT, early diagnostic work for children and so on?

**Ms WILLIAMS** - You need to remember that Child and Family Services are one component of what is in that building. Services like social work, OT et cetera, are currently serving much more than the child demographic. So they will need to continue in Clarence, whether or not Child and Family Services choose to move out of the building in the future, which is a possibility.

**Mr ALEXANDER** - There are two child and family centres planned for the eastern shore: one at Clarendon Vale and one at Bridgewater. We currently have a community health centre at Clarendon Vale and there will be a relationship between the services that we outreach or house there or whatever with Clarence, as a rule, with a place like Risdon Vale. We have a child health capability in Clarendon Vale and that will most move into the child and family centre, but whether it is driven by the relationship with the schools or by the child and family centre's acknowledgment of the services that we are operating, there is a connection across there and we have the south-east manager of Child, Youth and Family Services as our representative on that group. The focus of the Clarendon Vale Child Family Centre will be much more on the social than the health side of things. It is a gathering point for parents; it is a much more social thing. As Deb Leisser, South East Manager, explained it to me she wants the community to see it more as a good place to be than a visit to the doctor. So there will be a lot of ancillary education-type things. They talk about programs like Launching into Learning and good parenting programs, focusing on relationships between the child and the parent rather than between professional health providers and the parent. That is the focus the child family centre will have but our child health people will be represented there so there will be mutual referrals.

**Ms WILLIAMS** - It may be that some of the positions that you refer to, like social work, might outreach into those centres. I am not sure but I expect that would be a link.



**Mr ALEXANDER** - There will be referrals.

**Ms WILLIAMS** - Yes.

**Mr COOPER** - The building is very flexible in design anyway so the areas that are normally allocated to child and family could well be used for other service groups in future if there were changes down the track.

**Mr ALEXANDER** - I think that is a really important point in everything we do, that the building will outlast the current ideal model of care - or those in five and 10 years. The building will outlast all that. Without wishing to appear facetious, one of the comparisons I have made is that if you were building Eastlands as a shopping centre, you could get well down the design of it knowing that you would have a couple of supermarkets, a few speciality shops and a food hall. Similarly, we know that we have some administrative capacity, some social meeting room capacity, some consulting rooms which have egress issues and some that have infection-control issues, but it still gives us the flexibility to evolve the service to meet the community needs without having to continually update the building.

One of the lessons we have learned from history is that they used to build the buildings for that point in time and they were not adaptable into the future. That is one of the issues we have at Clarence now.

**Mr COOPER** - In terms of the timelines, we have resolved the service planning issues. The government's model is still being worked through with business plans and so forth. The building's physical configuration was signed off by the user groups recently. There was delay in that we had a budget overrun, mainly due to the Federal stimulus packages starting to ramp up construction budgets on us. Whilst it might have only been a couple of million dollars, it was still a couple of million dollars that we needed to bring back.

**Mrs NAPIER** - What percentage inflation are you dealing with at the moment, as a building index?

**Mr COOPER** - Anywhere between 10 per cent and probably up to 20 per cent.

**Mr GRIMSDALE** - It is wildly variable; there is no set rule at the moment.

**Mr COOPER** - It places a bit of constraint on anything we do now that we might have had in the pipeline for some time.

**Mr GRIMSDALE** - Buildings of this type are pretty attractive to contractors but the BER money has lifted it for a lot of the smaller jobs which are difficult to construct. A lot of people want buildings like this to build because it is a good long-term commitment; it is a good single building.

**Mr COOPER** - We have had to maintain some budgetary precaution because that is the advice you get. The market place is increasing, so we have had to modify our design a little to accommodate that but we are happy with that now. So that has created a bit of delay, which is why we now have a two-stage construction process. We will have an

early works component, some civil works where the existing carpark is. That will bring it down to a new level for the future basement. We hope to have that out to tender towards the end of October. That will begin some early works while the rest of the documentation is completed and that should happen in about January 2010. Within the main building we also have that in two stages. The GP super clinic and oral health will be completed by July 2010 and the rest of the building by December 2010.

**Mr ALEXANDER** - There is some pressure from the Federal Government to have the GP super clinic completed in that time frame.

**Mr COOPER** - Yes. It also enables us to keep the existing facility operating exactly as it is while we construct the first stage of the building. We can then transfer everybody over into that new building that is within the existing, demolish the rest of it and finish off construction for the rest of the building. So there are no major decanting issues or temporary accommodation that we need to resolve, particularly with clinical requirements, which would be quite an expensive exercise.

**Mrs NAPIER** - On page 22 you said stage 1 would be June 2010, so you have moved it on a month?

**Mr COOPER** - End of June or beginning of July is the timetable.

**Mrs NAPIER** - But stage 2 has been brought forward to a tighter time frame?

**Mr COOPER** - The original intention was December 2010. We have to see what the market place says about that. It may move out a little bit.

There are direction-finding aspects that the architects want to include within the facility, so we have different pods with different service requirements. Having colours for the different areas we believe will assist patients in going to the appropriate area.

Within the building concept we have the first couple of pods - the chronic and complex care hub where the Royal Hobart's outsourced services will be provided with treatment bays and treatment rooms. Within them we will have interview rooms. That is where the social workers, podiatry and physiotherapy will be working. We may find that mental health may need more space and it can share some of those consult spaces. That is also part of the whole integrated care philosophy; spaces will be used between different service groups where they have an overload situation.

Pod 3 is the mental health area. We have a special treatment room, consult rooms and staff work stations. That was a little bit of a compromise in the design philosophy for mental health. The original overall concept was that this would be a pure clinical level on the first floor. Staffing would be on the upper level where you could get more transfer of knowledge and information and so forth, but mental health very strongly felt that they needed to have their staff right beside their clinical area and did not need quite the integration with the other services. So we have accommodated that and brought them onto the same level. There are also specialist functions with mental health with what they call their CAT room, which is a critical-incident space where there is essentially a permanent team of four people monitoring special-case patients.

Within there we also have a reception and sub-wait area because mental health patients have issues with being in a general waiting area. There may be issues in a general waiting area with some of the special clients they may have, so we have provided them with their own sub-wait area.

**Ms WILLIAMS** - We are trying to acknowledge that mental health services have a whole client group that do not necessarily fit into the chronic and complex space. They have particular needs in the same way that oral health has around their client group. However, they would be part of the integration where their clients were chronic and complex, so that is part of the rest of the facility, if that makes sense.

**Mr COOPER** - The next hub, pod 4, is the oral health area, so for them there are eight dental treatment surgeries. At the moment they have five surgeries, so it's an expansion on that capacity to provide adult services. Also, whilst one of the rooms will be a surgery most of the time, it will be seen as their training surgery area. Then there are the standard support areas of a sterilisation lab and prep area, stores, and reception - and again, for them we're providing a sub-wait area at a distance relative to the main waiting area; it has been seen as appropriate to have its own waiting area nearby. As to the sheer scale of the building, once we have picked up so many different groups, there is more than 100 staff who will be on that site. To give you an idea of the floor area, we're talking in the region of 3 000 square metres for each level.

Within the GP superclinic hub there are about 16 consult/treatment-type rooms. It has its own mini-ops rooms, which Sally touched on before, as part of that opportunity within the whole facility to attract external GPs. There are also their own treatment rooms, nursing clinic-type spaces, and their own separate front-of-house reception. They will operate quite independently to the ICC in terms of reception because of the clients they are seeing but also because they will be operating at different hours. This can operate as a stand-alone component within the entire building and will operate longer hours than the rest of the facility.

**Mrs NAPIER** - On our map is that on the right or the left?

**Mr COOPER** - This is on the right-hand side.

**Mrs NAPIER** - So they basically have their own waiting area?

**Mr COOPER** - Yes.

**Mr ALEXANDER** - It is quite possible that the GP clinic will work different hours to the rest of the centre. It might work into the evenings, so it really needs to be self-contained so that people who visit that service can't wander at will into the rest of the centre, just for security reasons.

**Mr COOPER** - Within that space is also where we are going to have the youth space and its own triage area.

Pod 7 is the central courtyard, the gymnasium, children and family and the ICC front of house. The gymnasium is able to open out into the larger courtyard and provide a larger area which could be seen as a treatment space as well as an area where staff may be able

to relax when it is not being used for treatment-type functions. We also have a pathology area and a needle exchange program there, which has its own separate access along the same lines as the existing needle exchange. We have also proposed a cafe at the front of the building. This is an area where, if patients turn up and the GPs are running half an hour over time, for example, rather than waiting in a sterile waiting area they can sit and have a coffee and read a magazine or the paper and be a bit more relaxed while they wait for their appointment.

**Mrs NAPIER** - Why would you have your needle exchange area facing onto where the children and family groups are going to be waiting?

**Mr COOPER** - The needle exchange has an external access; it is right at the top left-hand corner. The internal access is more for the clinicians.

**Ms WILLIAMS** - The clients don't come in.

**Mr COOPER** - The clients don't come internally into the building.

**Mrs NAPIER** - Is there a doorway there?

**Mr COOPER** - Yes, there's an external doorway. So they will arrive discreetly, come into that space, do their -

**Mrs NAPIER** - Does that exist there now?

**Ms WILLIAMS** - It does, and those clients like their own separate access and not to have to come in.

**Mrs NAPIER** - I was going to say, I couldn't imagine them coming in the front door.

**Mr COOPER** - No.

The upper level is where we have the meeting areas. This is the group therapy-type areas, plus group training facilities for staff. On the left-hand side are the staff work areas and on the right-hand side of the meeting rooms is the research and training area. This is where the University of Tasmania and GP training will utilise the space for students who are operating out of that centre.

I haven't shown a slide of this but we do have a basement area as well with a bit of undercover secure car parking, with some bike storage areas, change rooms and showers, and also a pharmacotherapy space for alcohol and drugs. Again, that is a separate access area for a very specialised client group looking at drug modification therapies basically; I think that is how it is used.

Within the building itself, the agency is, as in any new building, certainly aiming to have environmental outcomes, so we are looking at solar hot water, not just for direct hot water at the tap but also for general space heating, which will be supplemented by probably some ground-sourced heat pumps underneath the building because that's a very efficient form of heating.

Over the courtyard there is a product called ETFE, specialised plastic sheets filled with air basically, an air bubble-type arrangement which allows full light to come into the space. You get very good insulation properties out of that product and it makes the central courtyard a space which can be used as a treatment area, but with an environment that feels like you are almost outside.

**Mrs NAPIER** - Will it get super hot?

**Mr COOPER** - No, we will have return air coming into that space and being drawn out at a high level. We will have heat exchanges which will take that heat and utilise it for heating the rest of the building when required, or just discharge that hot air during summer.

**Mrs NAPIER** - What is the lifespan on the roof?

**Mr COOPER** - I think it is like normal construction material essentially. It is a long-life product. I could not tell you an exact time.

**Mr GREEN** - Self-cleaning?

**Mr COOPER** - I don't think so - a bit of rainwater externally.

**Mr GRIMSDALE** - You pitch them up to a level so that the rain runs off, but there is always some area where it's not perfect.

**Mr COOPER** - As to the actual construction of the building with its external walls, what we are looking at is a coolroom panel type of construction that is going to give us very high insulation levels, well above minimum PCA. It is also very quick to install, needing fewer tradespeople, is economical and we believe it will give us time advantages in construction as well as cost advantages.

All windows will be double-glazed because we're aiming for a very thermally-efficient envelope for the building. Essentially around 50 per cent of a building's energy consumption is wasted because of poor external fabric, so getting the passage design right is a critical aspect and we will be able to significantly reduce our heating and cooling requirements by having a very thermally stable building. Within the design in the basement area we are using free cooling from that which will remain at between 12 and 14 degrees constantly. During summer the air will be drawn through there and be cooled to transmit into the space.

The aim for the building is to achieve a five-star green-star rating. The green star program has just recently expanded into health facilities and we would like to see this as being one of the first in Australia to be accredited under that scheme. The financial constraints probably mean that we may not achieve that five-star rating; we may be four-star, but the architects will certainly be pushing the boundaries and getting as close to that as we possibly can.

Through the use of what are nominated on the drawings as Zen gardens - they are essentially internal courtyards again - they are, I suppose, considered to be the lungs of the building. They provide ventilation opportunities internally into the spaces, and

90 per cent of the occupied areas will now get natural light and the ambience that comes from that.

**Mrs NAPIER** - Will there be windows along there that can open and shut?

**Mr COOPER** - That's the intention.

**Mr GRIMSDALE** - With a big footprint like this it is very difficult to get natural light into the main guts of the building, so by breaking it up with these ventilation gardens, or contemplation or Zen gardens, it allows the light to come in from both directions from the perimeter but also from the centre, so it maximises the natural daylight.

**Mrs NAPIER** - Is there going to be grass in the gardens?

**Mr GRIMSDALE** - It will be a combination. There'll be some paving and some greenery in there.

**Mr COOPER** - The other advantage of having these areas is that the building has extremely long corridors which can look dark and long and fairly imposing, so by having these internal courtyards it breaks it up and provides a bit of natural light at intervals along there so it makes the distance look a whole lot less.

We will be looking at a high-efficiency lighting system and some of the other environmental issues we will be managing are low VOC paints and carpets. We will look at recycling as much of the existing building materials that we can. For the cooling labyrinth you need some thermal mass so the existing blocks will be recycled into the building, and in areas like that we will do whatever we can to recycle as much as possible rather than just demolishing and throwing away everything there.

We have on-site water harvesting and external sun shading so there are lots of good passive design principles there to minimise energy consumption and optimise the occupants' enjoyment of the facility.

**Mr HALL** - How much water will you actually harvest?

**Mr COOPER** - We haven't really calculated that at this stage. I think it was something in the order of six large tanks which might be 20 000 litres.

**Mr HALL** - Is it worth the capital cost?

**Mr COOPER** - We believe so. Whilst water may not be seen in Tasmania, particularly in -

**Mr HALL** - I know all that but in the context of this, is it really worth it or is it all just feel-good stuff?

**Mr COOPER** - It is a fairly minor cost on this project to have some storage tanks installed underneath. A tank is only a couple of thousand dollars so we see it as a minor cost.

**Mr HALL** - With probably a minor benefit, can I add?

**Mr COOPER** - That may be argued but it is also an important aspect of the green star rating scheme that we have water efficiency, so to achieve our -

**Mr HALL** - Yes, but in the total context of the water you use it would be minute, I would suggest.

**Mr ALEXANDER** - It depends how you use it. A lot of our mainland cousins rereticulate and use it for toilet flushing and things like that which means that you really need to have two sets of reticulated pipework, and that's where a lot of your cost comes. We don't anticipate doing that but it gives you gardening water and car washing facilities and a range of other things at just the cost of the tanks, really, and the collection points.

**Mr HALL** - Do you have any pumps associated with that?

**Mr ALEXANDER** - You have to have a pump associated with it.

**Mr HALL** - That's an energy user.

**Mr ALEXANDER** - Well, it's minimal. I don't know if it's anticipated here because I haven't been closely enough associated with the design, but the other reason we're using it and putting in some other facilities is for fire backup, because if there is a fire and there is other usage on the reticulated system you do not get the pressure or the volumes you require. So having some capacity there is generally recognised as best practice but there is always a debate about it.

**Mr COOPER** - The other aspect is that historically we believe we have had free water, but under the new regional water arrangement it is all metered and charged at exactly what you use.

**Mr HALL** - Has been in the north for years, hasn't it? It's only down here that you haven't.

**Mr COOPER** - Yes. If we can minimise our consumption, then that is minimising the ongoing costs for the facility.

**CHAIR** - Open for questions that have not been asked along the way.

**Mr HALL** - Sorry, I missed the middle of the presentation. I will just be devil's advocate although the question may well have already been asked. My first impression when I went over there was that I have seen a lot worse public buildings than that one. It seemed to be in pretty good nick to me and looked in good order. Did you look at the costs involved in retro-fitting what was there and putting in some additions rather than demolishing, to me - just on the surface, as a layman looking in - what looks like a reasonable quality building in good order?

**Mr ALEXANDER** - We did, although not in a huge amount of detail. There was some work done in Victoria a few years ago which showed that the refurbishment costs of a building - and they have since gone up - were 85 per cent of the cost of a new build. The 15 per cent that you saved you lost in about three years by not achieving energy efficiencies and spatial efficiencies. The other side of that is in staffing costs and things like that in an inefficient building.

We certainly looked at the site in great detail and the site is ideal to us. That building is in the middle of the site. If we refurbished it we would have to decant a lot of people and some of those are medical services which are very hard to replace and continue their service to the community through the rebuilding program. The level of the building sunk in at that bottom end means that it is wrong floor height for us and we cannot go up on top of it. It also has some quite big courtyards. It is a rambling building and a bit of a rabbit warren and is limited in space. All the health surgeries there are not that old. They were built since I have been with the Health department and are probably only five or six years old but they were built into the existing ambulance bay, so the amount of oral health service we could provide there was limited by the available space where we used to park ambulances and was not related to demographics. There were a lot of reasons without actually costing - and specifically because a lot of those costs include decanting costs, ongoing recurrent costs and so on - why it makes sense to rebuild.

**Mr HALL** - I have heard that 'decanting' word before. The police were going to be decanted over at Bellerive.

**Mr ALEXANDER** - It is a bane of our life, continuing the service capacity through a rebuild. Ideally, when you can, you move to a new site.

**Mrs NAPIER** - What is the cost of getting rid of the building?

**Mr GRIMSDALE** - It would be on the cost plan at some stage but I do not have a copy here.

**Mr HALL** - That is not included in the total project cost? I am looking on page 22.

**Mr COOPER** - It is - in the second line item under building works.

**Mr ALEXANDER** - It is something that vexes us, something that we come up against again and again - the costs associated with providing temporary services and with the ongoing recurrent costs. As Greg said, we will have a much more energy-efficient building which will keep the recurrent costs down. Things like that all come into it, as do the constraints we have in rebuilding. However well we try to do that, we always get tripped up. We rebuilt a lot of the Scottsdale Hospital and we thought we had it all right, but then a bloke came in with two-pack paint to paint the reception counter. The smell of the two-pack paint went through the hospital and we nearly had to evacuate the whole hospital - half a day's work that we had not second-guessed enough. The issues in trying to rebuild within an operating environment are really difficult.

**Mrs NAPIER** - I notice that you are using the cylindrical form of solar heat panel. Do they still come in as being more efficient than reverse-cycle hot water systems?

**Mr COOPER** - Yes. A reverse-cycle hot water system is probably about 60 to 70 per cent of a direct electric system, so it only consumes 40 per cent of the electricity. Let's say you had a 10-kilowatt, direct-electric hot water system. It would consume 4 kilowatts. In going to a solar system with electric boosts, that would drop further down to probably one or two kilowatts, so it is half again of a heat pump. You need the electric boosts because it is not available all the time.



We also believe, through our research, that the evacuated-tube type that we are looking at is more efficient than the flat panel versions. Across a typical day you get energy input for a longer period of time because you have the circular tubes, whereas a flat panel, whilst it is more efficient probably at any one time, has less opportunity across a typical day.

**Mr GRIMSDALE** - From the orientation of it.

**Mr COOPER** - Yes. The orientation is still much the same with the 43 degree angle to north and that sort of thing.

**Mrs NAPIER** - Once we get this sorted out as to what the rate will be for feeding back into the grid, is it likely to be net positive?

**Mr COOPER** - We are not actually generating electricity under this project; it is just the hot water side. We would need to put on some wind turbines. Photovoltaics are very expensive and have very long payback periods. Wind turbines in the appropriate location, like the Bruny Island project we are working on, work very well. However, in an urban location, with a low-rise building, it probably is not an appropriate technology.

**CHAIR** - Thank you for your attendance and presentation.

**THE WITNESSES WITHDREW**