

Princess Elizabeth Hospital Review

Health Systems Workshop

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Summary

Purpose and main findings of the Review

This review aims to assess the efficiency of PEH in comparison with what would be expected using standards of good practice and performance elsewhere, allowing for the special circumstances of Guernsey. Since PEH itself provides only some of the components of secondary and tertiary care, however, to be useful this review must look at the whole system of how services are produced and delivered, and this includes services provided by MSG, GPG and PCCL as well as PEH.

In essence, the review finds that there are significant inefficiencies in the production and delivery of secondary and tertiary services in Guernsey, and the observations and conclusions supporting this position are detailed below.

Allowing for data deficiencies, particularly in inpatient admissions and day case recording, PEH activity levels appear adequate compared with those expected, and the quality of services delivered appears adequate. Various improvements could be made to the internal management and operational efficiency of PEH as noted in the body of this review. But what stands out in this review is that the cost of on-island secondary and tertiary care is between 13 -21% more than it need be. This equates to between £6.2m and £9.4m of potential savings per annum.

It must be emphasised from the outset, however, that the causes of these inefficiencies do not lie primarily with the performance of the staff and management of PEH but with the structure of the relationships between the various organisations comprising the service. This structure is intrinsically flawed. It is:

- costing the tax payer significantly more than it should
- suppressing the quality of service that might otherwise and ought to be achievable, and
- causing stress and frustration in the workforce.

The main structural flaws include the following:

1. The consultants are not part of the PEH organisation and do not have the same interests and incentives as PEH. As a result, the services of consultants contracted from MSG are costing millions of pounds more than they should every year. Services for which the States (through SSD) pays £15.0m per annum could be produced for much less. At the same time, the divergent interests and separation of responsibilities are causing additional costs and inefficiencies within PEH. Admissions and other hospital workload for PEH are generated by MSG consultants without joint responsibilities for strategic and operational planning and management, and under no cost containment pressures. This results in severe problems for PEH staff. Theatre planning, for example, is reduced sometimes to last minute reactions from PEH staff as they have little control over what work is scheduled and the resource demands this scheduling makes. Decisions made by MSG consultants have more cost implications for PEH than for MSG – for example, a consultant can decide to introduce new or different surgical or medical procedures that cost PEH more to provide and supply (eg. new operating sets or equipment).
2. Accident & Emergency services are also contracted from a separate organisation, PCCL, resulting in similar problems. Moreover, since the cost to the consumer at A+E is the same as a consultation with a GP and since further services following that attendance at PEH will be free, A+E attendances may comprise much that should be more appropriately GP workload, and only 19% of A+E attendances result in inpatient admissions, low by UK levels. [CED Review 2011]
3. Off-island referrals for acute care are costing £7.7m per annum plus up to £2m in travel costs. Most referrals are generated by MSG consultants but paid for by HSSD (and SSD for travel). There is inadequate management of those cases, which can result in unnecessary expenditure: cases may stay too long and/or receive diagnostic or treatment procedures that may not be essential.

In essence, there is little or no control over the subsequent costs once the referral is made and, in the absence of a strong medically led commissioning function, there is no credible challenge to clinical process or choices.

4. The payment of GPs by per item of services they provide creates an incentive for patients to want referral to a consultant outpatient clinic where they are not charged. As a result, referral rates are relatively high compared with those in England. Outpatient attendances in 2012 totalled 74,300 compared with an expected level of around 40,000. At the same time, whilst GPs charge a patient for taking blood samples and for communicating the results, there is no charge to GP or patient for the pathology tests performed at PEH. As a result, 70% of PEH pathology workload is generated by GPs when the equivalent figure for England is more like 40% - and even that is under scrutiny for potential cost savings. There is the potential to reduce the cost of PEH pathology from its current £3.3m per annum – not by requiring further efficiencies in the pathology department (which are not likely) but by reducing demand generated by the GP payment mechanisms.

These important cost drivers are outside the control of PEH management and staff – and even of HSSD – because they are locked into long-standing contractual arrangements. Whilst these arrangements may well have served a purpose years ago, they do not now. Squeezing the budgets of departments in PEH will have no effect on these cost drivers and, given the cost savings already made within the hospital recently, serves no useful purpose. Indeed, because staff are well acquainted with the real causes of the problems, this financial squeeze produces only stress and frustrations. Effectively, staff are vested with responsibility without authority to act and implement change.

What needs to be done?

Improvements in efficiency and quality require structural changes in the way the various parts of the health care system operate and inter-relate. This requires changes in the ways providers are contracted and remunerated. Consultants cannot work like barristers brought in to address a specific problem. They must be an integral part of the clinical and management team, with concurrent interests, incentives and targets, and jointly ensuring clinically effective and cost-efficient patient pathways through the spectrum of prevention, care and management. This is best achieved with consultants, clinical, technical support and management staff working in one organisation.

Guernsey must now seek a solution to how a better organisational structure is achieved. Options range from employing consultants directly as part of the PEH structure within the public sector to setting up PEH as an independent contractor to HSSD with consultants employed by that organisation – and there are various ways in which these could be structured in detail. Common to all must be the development of HSSD as an effective commissioner of services operating a commissioning process with providers whether public or independent, and including overseas care providers.

These options should now be investigated in detail as a matter of urgency so that a politically acceptable solution can be designed and implementation begun before the date when notice of the existing contracts must be given in 2015. This will require a combination of detailed study of options and implications, and of negotiations with all parties. The initial steps of implementation should be taken as part of this study and negotiation period. These should focus on getting the key drivers of change in place creating incentives for the various components of the health system to seek further improvements through common goals.

This review has been undertaken in a very short time period and we recognise the data limitations. HSSD might consider commissioning further work to attempt to fill the major data gaps to refine evaluation of the performance of the secondary care system, and to assemble as complete a quantitative picture as possible of the workload being undertaken.

Contents

1. Secondary and tertiary care process and outputs

- 1.1 Caseload by specialty
- 1.2 Use of beds and average lengths of stay (ALOS)

2. Inputs to secondary and tertiary care on island

- 2.1 Staffing
- 2.2 Costs and financing

3. PEH internal structure, management and practice

4. Summary and recommendations

Annex A: Modelling hospital activity, bed requirements and staffing: the benchmark hospital

Appendices (separate volume)

1. Secondary and tertiary care outputs

For the purpose of evaluating quantitative aspects of the hospital's efficiency we constructed a benchmark secondary care service and compared this with the performance of PEH. The benchmark hospital is a description of the expected caseload, throughput, bed use and staffing of a hospital serving a population with the size and age structure of Guernsey, based on the average performance of NHS hospitals in England in 2011, and taking into account the proportions of work in each specialty that is currently procured off island.

Breakdowns of the populations of Guernsey and England are provided in Table 1 below. It can be seen that Guernsey has proportionately fewer children and young people, and proportionately more adults in the older working age group, plus proportionately more elderly people in over 75 age ranges.

Table 1: Population and age structure, England and Guernsey 2011

	England 2011		Guernsey 2011		
Age	Number	Percentage	Number	Percentage	Guernsey difference
0-4	3,328,700	6.3%	3,214	5.1%	(22.7%)
5-14	6,057,500	11.4%	6,321	10.0%	(13.5%)
15-44	21,510,900	40.5%	25,135	40.0%	(1.4%)
45-64	13,480,500	25.4%	17,859	28.4%	10.6%
65-74	4,592,200	8.6%	5,311	8.4%	(2.4%)
75-84	2,944,100	5.5%	3,560	5.7%	2.0%
85 & over	1,193,300	2.2%	1,515	2.4%	6.7%
Totals	53,107,200	100.0%	62,915	100.0%	

Source: Guernsey Annual Population Bulletin, Policy Council of the States of Guernsey.

The characteristics of the benchmark hospital derive from a statistical model constructed by the consultants over two decades of health planning. It has been used successfully in a wide range of countries, including other island states, and has been continually refined and updated over the years. Annex A provides a detailed description of the model.

1.1 Caseload by specialty

Table 2 compares the 2012 recorded PEH data on admissions and day cases by specialty, with the projected inpatient and day caseloads by specialty. Data on inpatient and day case finished consultant episodes (FCEs) were also provided but have not been included in this comparison for the reasons given below.

The total recorded inpatient caseload is below the projected benchmark level of activity, although some specialties have recorded caseloads well above the projected level. It has been suggested to us that the PEH data on patient activity is incomplete: if this is the case, it may explain some of the differences. It will also be noticed that the absence of an A+E consultant results in a recording of zero A+E admissions, thus increasing admissions logged under other specialties. This also may explain the exceptionally high caseloads recorded in some specialties. Specialties that have recorded higher than expected caseloads, notably paediatrics, general surgery and orthopaedics, may be treating patients that in the NHS would be handled by consultants in a different specialty. Alternatively there may be a lower than expected threshold for admission in, for example, paediatrics.

Alternatively, or in addition, it may be that the hospital has a commendably higher than expected day case ratio, which would reduce the need for inpatient admissions. Unfortunately, the data provided to us on existing PEH day cases by specialty was based on a definition of a day case different from that

used in the NHS, which obscured comparison between the two sets of figures. The PEH figures include activity that in the NHS would be recorded elsewhere, for example as day patients or as diagnostic activity. Annex 1 to this main report describes an analysis undertaken to separate out these extraneous data. The resulting day case estimate is thought to be credible in clinical terms, and supports the view previously expressed to us that the hospital has a better day case ratio than the average NHS trust in 2011-12.

Table 2: PEH caseloads, existing and projected

PEH Caseload	Existing		Projected		Comparison		
Specialty	Day cases	Inpatients	Day cases	Inpatients	Day cases	Inpatients	Notes
General Medicine	593	2,526	540	2,598	✓ 110%	✓ 97%	Close to projected levels
Paediatric Medicine	102	1,121	79	607	✓ 129%	✓ 185%	Much higher level of activity than expected
Geriatric Medicine	0	22	14	458		✓ 5%	Majority of admissions are via the rehab unit
			0	0			
Cardiology	18	16	48	119	✓ 38%	✓ 13%	Recorded activity is very low
Chest Medicine	0	0	56	243			Presumably included in general medicine
Dermatology	0	1	128	135			Handled by GPs
Gastroenterology	353	121	152	198	✓ 232%	✓ 61%	Endoscopies and bowel screeningst reated as day patients but should be recorded elsewhere
Genito-urinary Medicine	0	0	0	0			Not a PEH function
Infectious Diseases	0	0	0	0			Not a PEH function
Nephrology	0	77	49	115		✓ 67%	Repeat attendances for dialysis recorded as day patients
Neurology	0	0	0	0			Not a PEH function
Oncology	0	306	199	252		✓ 121%	Repeat attendances for chemotherapy recorded as day patients
Rehabilitation	0	259	0	8		✓ 3238%	Includes geriatric admissions
Rheumatology	18	1	7	9	✓ 257%	✓ 11%	Mainly handled off island?
Other Medical Specialties	2	0	0	0			
			0	0			
General Surgery	1,119	1,266	579	849	✓ 193%	✓ 149%	May include some other surgical specialties; day caseload suspect
Trauma & Orthopaedics	559	915	155	323	✓ 361%	✓ 283%	Much higher level of activity than expected
			0	0			
Cardio-thoracic Surgery	0	0	0	0			Not a PEH function
ENT	342	378	509	565	✓ 67%	✓ 67%	Significantly lower level of activity than expected
Neurosurgery	0	0	0	0			Not a PEH function
Ophthalmology	561	49	152	187	✓ 369%	✓ 26%	Much lower level of activity than expected
Oral Surgery	128	11	13	23	✓ 985%	✓ 48%	Projection adjusted; day caseload suspect for secondary care
Paediatric Surgery	0	0	0	0			Not a PEH function
Plastic Surgery	0	0	0	0			Not a PEH function
Radiotherapy	0	0	0	0			Not a PEH function
Urology	410	168	420	1,030	✓ 98%	✓ 16%	Much lower level of activity than expected
			0	0			
SCBU	0	0	0	0			Activity recorded in paediatrics
Obstetrics	0	794	36	920		✓ 86%	Close to projected levels
Gynaecology	670	363	274	953	✓ 245%	✓ 38%	Lower level of activity than expected; day caseload suspect
			0	0			
Accident & Emergency	0	0	207	217			No A&E consultants; cases recorded in other specialties
Anaesthetics	0	279	2	14		✓ 1993%	Very high caseload
Pathologies	0	0	11	13			Projection adjusted to allow for haematology mainly off island
Radiology	93	16	29	33	✓ 321%	✓ 48%	Differences in case numbers not thought to be significant
			0	0			
Adult & Child Psychiatry	0	285	1	110		✓ 259%	Unexpectedly high level of admissions
Old Age Psychiatry	0	152	0	28		✓ 543%	Unexpectedly high level of admissions
Mental Handicap	0	0	0	21			
Totals	✓ 4,968	✓ 9,126	✓ 3,660	✓ 10,028	✓ 136%	✓ 91%	
Totals excluding psychiatry	✓ 4,968	✓ 8,689	✓ 3,659	✓ 9,869	✓ 136%	✓ 88%	

1.2 Use of beds and average lengths of stay (ALOS)

The model provides estimates of average length of stay (ALOS) by specialty, adjusted for age structure and based, like the activity projections, on NHS 2011 data for England – see Table 3. For PEH we have been provided with ALOS related to admissions. Comparison with the projected figures shows that, on average, lengths of stay in PEH are 21% high. Some of the possible reasons for this are discussed in Section 3.

The data on PEH admissions and lengths of stay can be used to assess average bed occupancy. By multiplying the one by the other an estimate can be made of the number of occupied bed days used

at PEH, which can be compared with an estimate of the number of available bed days over the same period. This results in an estimate of the average bed occupancy in 2012 of 69 percent. Observations made during our tours of the hospital suggest to us that bed occupancy is higher than this on average, which tends to confirm the view expressed above that there have been some omissions in the recording of inpatient admissions.

Table 3: PEH Beds and throughput, projected and existing

PEH Beds and throughput	Benchmark projections					PEH admissions data				
Specialty	Available beds	ALOS IP	Occupancy %	Day beds	Total beds	Existing beds	Existing ALOS	% of projected	Implied OBDs	Implied % occupancy
General Medicine	47.0	5.6	85%	2.1	49.1	53	6.5	116%	11,914	
Paediatric Medicine	4.6	2.0	73%	0.3	4.9	9	3.2	157%	3,084	
Geriatric Medicine	18.8	13.5	90%	0.1	18.8	24	30.0	223%	7,110	
Cardiology	2.0	5.0	83%	0.2	2.1		4.1	83%	58	
Chest Medicine	5.1	6.7	87%	0.2	5.3					
Dermatology	3.3	7.8	89%	0.5	3.7		14.0	179%	14	
Gastroenterology	4.0	6.4	87%	0.6	4.6		3.0		86	
Genito-urinary Medicine	0.0	0.0	0%	0.0	0.0			0%		
Infectious Diseases	0.0	0.0	0%	0.0	0.0			0%		
Nephrology	2.6	7.3	88%	0.2	2.8		2.4	33%	39	
Neurology	0.0	0.0	0%	0.0	0.0			0%		
Oncology	4.2	5.1	84%	0.8	5.0		8.9	174%	2,263	
Rehabilitation	0.4	17.5	92%	0.0	0.4	inc				
Rheumatology	0.2	6.8	82%	0.0	0.2		1.0		1	
Other Medical Specialties	0.0	0.0	0%	0.0	0.0		36.0		612	
General Surgery	8.8	3.0	80%	2.2	11.0	25	3.5	116%	3,561	
Trauma & Orthopaedics	2.3	1.8	71%	0.6	2.9	19	4.4	241%	3,510	
Cardio-thoracic Surgery	0.0	0.0	0%	0.0	0.0					
ENT	3.7	1.6	68%	2.0	5.6		1.6	100%	588	
Neurosurgery	0.0	0.0	0%	0.0	0.0			0%		
Ophthalmology	1.4	1.9	72%	0.6	2.0		2.4	125%	103	
Oral Surgery	0.2	2.2	75%	0.0	0.2		1.1		13	
Paediatric Surgery	0.0	0.0	0%	0.0	0.0			0%		
Plastic Surgery	0.0	0.0	0%	0.0	0.0			0%		
Radiotherapy	0.0	0.0	-1%	0.0	0.0			0%		
Urology	17.8	5.3	84%	1.6	19.4		2.8	53%	448	
SCBU						3				
Obstetrics	5.7	1.5	67%	0.1	5.8	17	2.7	182%	2,123	
Gynaecology	6.5	1.7	70%	1.1	7.5		2.6	148%	898	
Accident & Emergency	3.5	5.1	87%	0.8	4.2			0%		
Anaesthetics	0.3	8.0	91%	0.0	0.3		3.8	48%	204	
Pathologies	0.3	7.7	89%	0.0	0.3			0%		
Radiology	0.2	1.9	72%	0.1	0.3		1.2	65%	11	
Adult & Child Psychiatry	16.9	54.4	96%	0.0	16.9	?	23.3	43%	5,027	
Old Age Psychiatry	7.3	92.5	98%	0.0	7.3	?	39.4	43%	2,956	
Mental Handicap	2.9	44.8	90%	0.0	2.9	?		0%		
Totals	170.0	5.3	85%	14.1	184.0	150	6.2	118%	44,622	
Totals excluding psychiatry	142.9	4.4	83%	14.1	157.0	150	5.3	121%	36,639	67%

This problem means that we cannot estimate with total certainty the number of beds required to handle the actual caseload, but probably fewer beds are needed than are used, at the moment. This tends to confirm the finding of the recent Capita Review of Length of Stay and Bed Utilisation that some beds can be closed. Reverting to the modelled activity and lengths of stay, we have projected a requirement for 143 inpatient beds (excluding psychiatry) and 14 day beds. This compares with a current total of inpatient beds in use of 146, plus 19 day beds. This finding suggests that at present there is no need to reopen the closed De Sausmarez ward. This issue and that of the private ward are discussed further in Section 3 under Service Development Opportunities.

Finished Consultant Episodes (FCEs)

In addition to the data on inpatient admissions and day cases we have been provided with data on inpatient and day FCEs covering the same specialties, and including estimates of average lengths of stay. These activity data are not strictly comparable with the projected caseloads which are expressed as admissions and day cases. Moreover, the lengths of stay stated for inpatient FCEs are considerably longer than those estimated for the inpatient admissions. If used to estimate bed day

totals, and hence bed occupancy, they imply that the hospital had an average bed occupancy of 150 percent, which is obviously impossible. Clearly there is an issue of definition here, just as there is with the day cases. However, these issues have not prevented us from reaching some conclusions on the hospital's efficiency.

2. Inputs to secondary and tertiary care on island

This section looks at the manpower and financial inputs used to produce secondary and tertiary services on-island, and compares these to those of the benchmark services allowing for off-island referrals and Guernsey pay rates.

2.1 Staffing

Existing staffing has been built up from budgeted FTEs in all categories for PEH, MSG, PCCL and GPG. Table 4 provides our projections of the hospital's manpower requirements, and compares these with the actual manpower currently employed by PEH (December 2012 staffing figures) and by MSG, PCCL and GPG. Numbers are expressed wherever possible as full time equivalents (FTEs) rather than as headcounts. This is important because the hospital has a large number of part-time staff.

Table 4: Staffing projected and existing

	Benchmark projected FTEs		Existing FTES						
Personnel by type	FTEs	Notes	PEH	MSG	PCCL	GPG	Totals	Existing/ projected	Notes
MEDICAL STAFF	55.5	Workload based	5.0	47.0	5.0	0.0	57.0	103%	
Consultants	32.5	Excludes psychiatry and public health	5.0	40.0			45.0		MSG FTEs for PEH work v private not available from MSG
Others	23.0	Registrars, house officers and others		7.0	5.0		12.0		PCCL: 3 A+E Associates full time, 2 Lead GPs 0.5 time, 10 GPs averaging 4 hours a week
NURSING STAFF	471.1	Population based	361.4	18.0	0.0	0.0	379.4	81%	
Qualified nurses & midwives	312.7		306.6	12.0			318.6		Includes theatres, outpatients, A&E
Nursing assistants	158.4		54.8	6.0			60.8		Includes auxiliary and unqualified
PROFESSIONAL, SCIENTIFIC & TECHNICAL	102.0	Population based	78.6	2.0	0.0	15.0	95.6	94%	
Physiotherapists	15.6		0.7			15.0	15.7		Asume 50% for PEH IPs plus OPs
Occupational therapists	10.8		10.0				10.0		
Speech therapists	3.9		1.9				1.9		
Dieticians	1.8		2.0				2.0		
Orthoptists	0.7		0.8				0.8		
Radiographers	18.2		18.5				18.5		
Pharmacists	9.2		16.5				16.5		
Laboratory scientists & technicians	32.9		17.3				17.3		
Other scientific & professional	8.9		10.9	2.0			12.9		
FACILITIES MANAGEMENT	170.2	Bed based	249.7	0.0	0.0	0.0	249.7	147%	
Estates management	32.7	Including EBME and waste management	46.8				46.8		PEH data includes central services
Portering	22.2		24.8				24.8		
Cleaning & domestics	32.2		98.0				98.0		
Catering	32.2		47.7				47.7		
CSSD	18.1		9.5				9.5		
Laundry	20.7		23.0				23.0		
Security & parking	12.1						0.0		
MANAGEMENT, ADMIN & CLERICAL	142.6	Bed based	129.9	76.0	0.0	2.0	207.9	146%	
General & senior management	13.5		inc	8.0			8.0		
Administration & clerical	129.1	Including health records and computing	84.3	68.0		2.0	154.3		
Central services admin / Corp HQ			45.6				45.6		Includes some hospital related functions - 50% of recorded staff charged to PEH
Other			13.5	0.0			13.5		
Total	941.4		838.1	143.0	5.0	17.0	1003.1	107%	

Staffing for the benchmark service has been built up using a combination of methods, based on where the best data is available to facilitate comparison:

- medical staff projections are based on the specialty workloads shown in Section 1.1 above
- nursing staff are projected on a basis of the population structure served

- professional, scientific and technical staff are also projected on a basis of the population served
- facilities management staff are based on benchmark bed numbers with staffing levels as planned by a private finance initiative (PFI) in England (more efficient than the average NHS service but achievable)
- management, administration and clerical staff are based on bed numbers.

Further details of the projections for medical staff are provided in Table 5.

Table 5: Medical staff projected and existing

Specialty	Benchmark projected			Existing			Location		
	Consultant	Other	Total	Consultant	Other	Total	PEH	MSG	PCCL
General Medicine	5.5	3.5	9.0	6				6	
Paediatric Medicine	2.0	1.0	3.0	4				4	
Geriatric Medicine	2.0	1.5	3.5	3				3	
Cardiology	0.5	0.0	0.5	1				1	
Chest Medicine	0.5	0.5	1.0						
Dermatology	0.5	0.5	1.0						
Gastroenterology	0.0	0.0	0.0						
Genito-urinary Medicine	0.0	0.0	0.0						
Infectious Diseases	0.0	0.0	0.0						
Nephrology	0.5	0.0	0.5						
Neurology	0.0	0.0	0.0						
Oncology	0.5	0.0	0.5						
Rehabilitation	0.0	0.0	0.0						
Rheumatology	0.0	0.0	0.0						
Other Medical Specialties	0.0	0.0	0.0						
General Surgery	3.5	2.5	6.0	4				4	
Trauma & Orthopaedics	2.0	1.5	3.5	3				3	
Cardio-thoracic Surgery	0.0	0.0	0.0						
ENT	1.0	0.5	1.5	2				2	
Neurosurgery	0.0	0.0	0.0						
Ophthalmology	1.0	0.5	1.5	3				3	
Oral Surgery									
Paediatric Surgery	0.0	0.0	0.0						
Plastic Surgery	0.0	0.0	0.0						
Radiotherapy	0.0	0.0	0.0						
Urology	0.5	0.5	1.0	1				1	
SCBU									
Obstetrics									
Gynaecology	2.5	1.5	4.0	4				4	
Accident & Emergency	2.0	4.0	6.0		5				5
Anaesthetics	5.5	3.5	9.0	9				9	
Pathologies	0.5	0.5	1.0	1			1		
Radiology	2.0	1.0	3.0	4			4		
Adult & Child Psychiatry	4.5	2.5	7.0	6			6		
Old Age Psychiatry	0.5	0.5	1.0	1			1		
Mental Handicap	0.5	0.5	1.0						
Others					7			7	
Totals	38.0	26.5	64.5	52	12	64	12	47	5
Totals excluding psychiatry	32.5	23.0	55.5	45	12	57	5	47	5

Note: The 2 existing oncologists and the nephrologist are included in the general medicine consultant staffing, that being their main specialty.

Medical Staff

Table 4 shows that there is just a 3 percent difference between the projected and existing total full-time-equivalent (FTE) numbers of medical staff. The modelled benchmark requirement, expressed to the nearest 0.1 FTE by specialty, showed a need for small fractions of a whole time equivalent in some specialties, and the total was about 11 percent less than the existing total. However, the impact of diseconomies in a hospital serving a small island population must be acknowledged. Wherever feasible, specialty projections are rounded up to the nearest 0.5 FTE on the basis that some of the smaller specialties can be served by a generalist physician or surgeon with a special interest in the smaller specialty. In specialties that necessarily stand on their own, such as anaesthetics, pathology, radiology and psychiatry the total number of doctors is expressed as a whole number of FTEs. This rounding process increases the total number of doctors that are required. Although this results in a fairly close match in the total, there are differences in individual specialties. Table 5 points up the need for consultants in accident and emergency. There may also be instances of over-staffing in some specialties although it is not possible to be precise about this because we have no specialty breakdown for the seven non-consultant doctors in MSG.

Nursing Staff

The comparison suggests that the hospital is under-staffed by nearly 20 percent, mainly in unregistered nurses. The issues surrounding the maintenance of adequate levels of nursing cover, particularly at night time, have been mentioned to us. The small numbers of support staff may mean that some lower level nursing tasks are being handled by other categories of staff, which may go some way to explaining the relatively high numbers of facilities management staff and in administration and clerical staff described below. In any case, infection rates appear to be low and quality appears not to be compromised (based upon the number of complaints and clinical incidents).

Professional, Scientific and Technical Staff

Overall, there are 6 percent fewer staff in this group of services than the projected total. It is possible that, as a result of diseconomies of scale in some of the smaller services, the difference is really greater than the figures suggest. Although comprehensive rounding up of the projections to whole FTEs would increase the requirement by nearly 50 percent, in practice this is not necessary because at PEH there is extensive use of part-time staff, reducing the impact of diseconomies of small scale but not eliminating them. There may be some differences between the NHS and PEH in terms of the way that tasks are allocated to specific categories of staff, which might explain why some services have more staff than expected, while others have fewer. It should be noted that the number of GPG physiotherapists attributed to PEH takes account of the fact that GPG's total complement of 30 cover both hospital and community needs.

Facilities Management

Comparison with the existing staffing levels suggests that there is considerable scope for rationalisation in these services. As is noted above, it may be that some of these staff are making good deficiencies in the nursing staff numbers, ie. undertaking jobs not included in the projected figures. This factor alone would be unlikely to explain away all of the differences.

Management, Administration and Clerical

Comparison with existing staff numbers is not straightforward because some hospital functions are embedded in the Corporate Headquarters and other central services, whose staff serve the whole of the health and social services and not just PEH. It has been assumed that 50 percent of the staff in relevant central services are attributable to PEH.

Summary

The total projected staff requirement for 941.4 FTEs compares with a recorded staffing level of 1,003.1 budgeted FTEs, including the Corporate HQ/central services staffing of 45.6 FTEs. PEH staffing (as opposed to MSG, GPG etc.) accounts for 838.1 FTEs. In December 2012 there were 807.3 paid FTEs in these groups, ie. the equivalent of 30.8 FTE posts were empty. The major areas of concern are nursing, where an increase in staff numbers appears to be justified, and facilities management, ie. ancillary staff, whose numbers appear to be excessive in some areas.

2.2 Costs and financing

National expenditure on health care

Table 6 shows the sources and applications of financing for acute services at primary, secondary and tertiary levels. It indicates that:

- total national expenditure on acute services, public and private, for primary, secondary and tertiary care could be £108.5m (making some assumptions about the extent of private care on and off-island for which no data are available)
- expenditure on secondary and tertiary services on and off-island, public and private is £74.9m
- expenditure by the States (HSSD and SSD) for secondary care on-island is £47.1m comprising £28.211m for PEH, £15.0m for the MSG contract, £0.950m for the GPG contract (acute care component), £2.143m for the SJARS contract, and £0.800 for the PCCL contract.

Table 6: National expenditure on acute care, £000s, 2012

Source	PEH	MSG	GPG	SJARS	A&E	off-island care	GP prescribing	GP consultations	NP consultations	PHC other	total States	total private	total all
States:													
SSD		15,000	1,900			2,000 ¹	14,500 ²	3,038 ³	481 ⁴		36,918		
HSSD	28,211			2,143	800	7,714 ⁶					38,868		
Private:	6,000 ⁸	7,500 ⁹	633 ¹⁰	600	1,035 ¹¹	7,500 ¹²	1,695 ¹³	10,215 ¹⁴	1,839 ¹⁵	2,785 ¹⁶		32,767	
total acute	28,211	22,500	2,533	2,743	800	17,214	16,195	13,253	2,319	2,785	75,786	32,767	108,553
total secondary and tertiary	28,211	22,500	1,267 ¹⁷	2,743	800	17,214	-	-	-	-	58,718	16,233	74,951
total on-island secondary	28,211	22,500	1,267	2,743	800						51,218	6,519	57,737
total States on-island secondary	28,211	15,000	950	2,143	800						47,104		
	253,152 consultations @ £12												
	253,152 consultations @ £40.35												
	80,112 consultations @ £6												
	80,112 consultations @ £22.95												
	travel costs to UK												
	acute care only												
	Prescribing Support Unit Annual Report 2011. HSSD												
	About 75% of GPG work is via referrals from MSG, the remainder is charged to patient												
	28% of GPG staffing time is for PEH patients												
	estimated as:												
	595 path - 200 a day 70% from PHC at average of £17												
	690 prescription fees												
	500 consultation calls, out of surgery work												
	1000 non-subsidised private												
	2785 total												
	¹⁸ Paid by consumers but not an additional cost of producing PEH services												
	¹⁹ 15,923 A+E attendances @ average of £65 (allowing for night attendances); paid by consumers but not an additional cost of producing PEH services												
	²⁰ Notional estimate; no figures available from MSG												
	²¹ Notional estimate; no figures available												
	²² Assumes 50% of GPG work is acute care												

Costs of secondary care

Secondary care is provided by PEH, MSG, PCCL and GPG. Until now there has been no clear picture of the total cost of running PEH. This is because many of the costs attributable to the hospital are contained in budgets for vertically integrated services which cover all relevant sites in Guernsey, and include primary and community care as well as the acute inpatient and outpatient care delivered by

PEH. Separating out the PEH cost from these budgets, while technically feasible, is not straightforward.

Instead, we have built up a budget cost for PEH in 2012 based on the staff numbers described above. These have been costed using the rates of pay applicable to each pay grade. Some approximation has been necessary, as we do not yet have complete information on the pay grades applicable to each category of staff. Allowances for the employer's contributions to the pension scheme have been added, and the resulting total staff cost has been augmented by a further allowance for non-staff costs (medical and non-medical supplies, utilities etc). The percentage add-on required to cover these items derives from an analysis of the 2012 costs recorded in the recent HSSD Budget statement. Costs for the benchmark service have been built up in the same way using the staff projections shown in Table 5 and applying Guernsey rates of pay and allowances.

The results are produced in Table 7. This shows:

- the cost base for manpower provided by HSSD using average grades, rates and pension contributions
- the resulting costs for PEH of £29.094m (to which the costs of the contracts have been added in the last rows) amounting to £45.844m excluding the SJARS in order to compare with the benchmark service
- the cost of providing an integrated service in which all personnel (PEH, MSG, GPG and PCCL) were employed by PEH directly at Guernsey rates and with no contracts – £39.677m
- the cost of PEH using the manpower projected for the benchmark service employed at Guernsey rates but retaining the contracts as currently - £43.685m
- the costs of the benchmark service using manpower projected for the benchmark service employed at Guernsey rates with all personnel employed by PEH directly - £36.416m.

This analysis indicates that the States is paying a premium of £6.167m for the contract arrangements over a simple direct employment model, and a premium of £9.428m over the equivalent benchmark service which includes the strengthening of the nurse staffing. Even allowing for less-than-perfect data, these are significant sums resulting from the inefficiencies of the system.

The integrated service options (with all staff employed) do not necessarily imply that the organisation would be in the public service – the whole organisation could be independent. It is based on all staff being part of one organisation and paid salaries comparable to the rates of pay applicable to each pay grade now. In practice, somewhat higher rates may be needed to attract some senior medical staff from private practice with MSG or from overseas. There may also be an issue over the need for and cost of professional indemnity insurance which we have not been able to address in this analysis. In short, the potential savings revealed here may be reduced in practice, but there can be no doubt that significant savings are available if structural reforms are undertaken.

Table 7: Secondary care costs summary, 2012

	Costing base				PEH 2012		Benchmark service	
	Average grade	Rate	Per	Pension	Existing	Integrated service	With existing contracts	Integrated service
PEH Staffing								
MEDICAL STAFF					604,787	6,152,766	650,547	5,291,347
Consultants		107,350	YR	12.7%	604,787	5,443,079	0	3,931,112
Juniors		52,488	YR	12.7%	0	709,688	650,547	1,360,234
NURSING STAFF	B5-04	23,374	YR	12.7%	11,105,766	11,616,437	12,837,925	13,348,596
Qualified nurses & midwives		29,018	YR	12.7%	10,024,371	10,416,727	9,832,611	10,224,967
Nursing assistants		17,501	YR	12.7%	1,081,395	1,199,709	3,005,314	3,123,629
PROFESSIONAL, SCIENTIFIC & TECHNICAL	B14	28,226	YR	12.3%	2,492,328	3,031,313	2,695,777	3,234,761
Physiotherapists								
Occupational therapists								
Speech therapists								
Dieticians								
Orthoptists								
Radiographers								
Pharmacists								
Laboratory scientists & technicians								
Other scientific & professional								
FACILITIES MANAGEMENT	D02	432	WK	11.0%	6,233,095	6,233,095	4,248,020	4,248,020
Estates management								
Portering								
Cleaning & domestics								
Catering								
CSSD								
Laundry								
Security & parking								
MANAGEMENT, ADMIN & CLERICAL	B10	24,190	YR	12.3%	3,529,581	5,648,960	1,754,651	3,874,030
General & senior management								
Administration & clerical								
Central services admin including Corp HQ								
Totals	Manpower				23,965,557	32,682,570	22,186,920	29,996,755
	Non-staff ratio	21.4%						
	Non-staff costs				5,128,629	6,994,070	4,748,001	6,419,305
	Sub-total				29,094,187	39,676,640	26,934,921	36,416,060
	MSG				15,000,000	inc	15,000,000	inc
	GPG				950,000	inc	950,000	inc
	PCCL				800,000	inc	800,000	inc
	Total				45,844,187	39,676,640	43,684,921	36,416,060
	Difference					6,167,546	2,159,265	9,428,127
	Difference %					-13%	-5%	-21%

Costs of off-island care

Table 6 above shows that around £7.7m pa is spent on overseas care by HSSD. In addition SSD pays some travel costs for patients which could be up to £2.0m pa. Two main aspects of overseas care may offer some potential efficiency savings:

- unnecessary overseas referral
- unnecessarily long stays by patients overseas, or non-essential treatment whilst there.

We have not been able to look at this in detail. From what we can see unnecessary referral is not occurring although there may be further opportunities to reduce costs by more use of visiting consultants seeing several patients on island. Where unnecessary costs may be incurred is in uncontrolled expenditure once patients are undergoing off-island care. It is not possible to estimate the extent of any savings at this point, but on-going work to strengthen commissioning policy and protocols will bring some control of expenditure.

3 PEH internal structure, management and practice

Management Structure and Leadership

The current management structure for the Acute Services is provided at Appendix 2. This appears to work well in practice (within the confines of what is directly managed within PEH). There is clearly confidence from middle management tiers in both the structure and the management style which offers frequent and open communication, mutual support and sharing of issues, concerns and solutions. Staff were found to be helpful, enthusiastic and innovative, but they are also clearly frustrated, pressurised and feeling unsupported from top management (refer also Appendix 3).

There is widespread feeling at middle management level that whilst support and direction from above may be setting a vision, it is not connecting to their operational endeavours. They feel unsupported with practical strategic planning and how this translates into 'plans for today'.

In our meetings with middle managers, this was reflected in frequent references to the plethora of 'top priority' issues coming down from above which competed detrimentally with operational tasks. More time was being spent on a succession of top-down priorities while the corporate developments intended to make life easier were suffering from delayed and sub-optimal implementation. An example of this that we saw is the draft Operational Plan 2013-2016. This lacks the 'connective tissue' of specifics to show managers how this applies to them, what it means in practice for their work, and that the challenges ahead are appreciated and understood by top management. It has lots of references to corporate activity and objectives, but little to areas of hands-on service delivery.

Committee Structures

Certainly within the hospital, the committee and meetings structure appears top heavy and care should be taken to ensure needless duplication. That said, the meetings are well spaced chronologically. The bigger problem appears to be the quality of direction (lack of detail) from top management level to inform these agendas. This results in managers exercising a large degree of latitude to devise their own agendas, and this can then bring them into conflict (time and effort) with requests from above for data that does not help them operationally. The absence of clinical leads inputting to this activity is also a significant weakness.

Corporate Support Services

Assistant Directors often have competing or even conflicting priorities imposed from Directors including those with whom they do not have a line relationship. This creates pressure and potential conflict. Perhaps all directives could be routed through the up-line director or at least facilitated that way so that timelines and deadlines can be planned and outcomes improved.

Human Resources

The absence of an HR Director, combined with a number of HR vacancies, has had a knock-on effect on the efficiency of managing HR activities, especially in supporting service development bids, and recruitment and retention. Centralising HR under SAP has meant that the business partner arrangement has been largely withdrawn while the new hub is unfamiliar with the particular needs of the health sector. Personnel procedures and practices are not yet in place, and managers are faced with ever more demanding HR problems for which there is a declining pool of support. Many senior managers now have personally to collect their own statistics and returns, and then adopt 'creative approaches' to problems such as recruiting. This may keep the manpower at safe levels but with a cost financially or in quality.

Business/Financial Support

Operational Managers should be more involved in budget setting. These key managers do not appear to be involved integrally in formulating and setting the budgets for which they are subsequently held responsible. Budgets simply roll on year-on-year and so are not related to staff in post. This approach to business planning is another example of where top-down structures and management puts managers on the back-foot.

SAP has been cited on a number of occasions as a corporate priority that was supposed to help managers in the long term but which is not producing the outputs they need in some key areas. Some support functions (including HR) are already eroded in anticipation of the new arrangements and this now leaves managers exposed with both new and old systems ineffective.

Business Intelligence Unit (BIU)

This is an excellent innovation and should serve the acute services well as long as it takes account of managers' real information needs as well as corporate monitoring and planning needs. It is not there yet, and quite senior managers are having to do even some basic tasks such as chasing recruiting progress and data collection for routine reports. A major challenge will be identifying what data needs to be collected and making it relevant, accurate and timely when presented to managers.

PAG has also come under frequent criticism. The procurement process appears to have ground to a halt with this group not having met since 2011. Potentially, this is a high-risk situation. Apart from regulating the procurement process to ensure consistency in cost and quality, there are two very important aspects of procurement that PAG should assure:

- a predictability to the timeliness of purchasing that the services can rely upon which ensures that 'stock-outs' do not occur
- a planned replacement programme to ensure that major essential items of plant and equipment are programmed for replacement so as not to compromise services through sudden breakdown or non-availability.

At the same time, addressing this would provide a large element of predictability in major capital equipment expenditure. Apart from patients and services being compromised, unplanned major expenditure is more costly as well as inconvenient, and could lead to litigation. PAG should be re-instated at the earliest opportunity as its absence is yet another unnecessary risk and pressure that operational managers have to deal with.

IT and Information Support

As mentioned above, the BIU should ensure that the data it collects and produces provides managers with the information they need to deliver front-line services effectively and safely. This information must be relevant, accurate and timely, and getting the balance right requires regular engagement with managers from the outset. Receiving large quantities of disaggregated data is not helpful to busy service managers, and reports must be customised to managers' needs.

As long as the MSG contract continues, there is also a real need to enter into data collection jointly so as to better inform both parties of their performance across a range of parameters – clinical and non-clinical. This need has been identified in a number of the Specialty Reviews (see Appendix 1).

The move towards a comprehensive electronic patient record (EHSCR) is another example of a good initiative losing momentum among a wide range of competing priorities. Implementation is behind schedule, prolonging difficulties for operational managers.

Business and Strategic Planning

The fiscal and planning year is January-December, and there is an annual planning cycle. A Corporate Plan is drawn up every three years and circulated to the PEH Directors and Assistant Directors, and updates requested annually. Service departments then respond to this by providing the necessary details to support specific service developments and business cases.

However, the draft Operational Plan 2013-2016 currently 'in consultation' does not appear to offer any specific indications as to where acute services need to develop, consolidate, expand or contract. Evidence (by way of performance data) exists but, under the current arrangements, the initiative appears to reside solely with MSG making bids for staff and equipment which are then presented as required. Only if a consultant leaves or retires, or if MSG proposes a new extension of service, or the mandatory 5 year review is due, does there appear to be an opportunity to look at how services might

change. Furthermore, without a medical director role in PEH, there is no mechanism to provide a credible challenge to the decisions and proposals of MSG. This is totally reactive and adds to the frustrations and sense of disempowerment within the workforce. As a result, not all departments create a formal plan document annually because they do not feel the need to. This situation creates inconsistency in plan preparation, understanding and commitment, and can also result in inhibiting innovation as it tends to perpetuate an environment of reaction and crisis management.

That the service departments play a reactive role in a cascading approach to planning may also keep HSSD on the back foot, and it is strongly recommended that the service departments should themselves offer service development options and solutions at an early stage each year, and that these should be included within a broad framework outlined at corporate level (which must include clinical initiatives). This would encourage service departments to be innovative in making adjustments to service profiles while operating within limited financial resources, and offer the opportunity for more robust risk assessment and option appraisals. For this to be effective, however, would require the hospital team and the consultants to have much more in the way of shared objectives and accountability – impossible to achieve under the current contractual arrangements.

The degree to which recent strategic developments (such as SAP and the procurement process) have impacted upon operational demands should not be underestimated, especially when other changes have already resulted in less support to senior operational managers who then have to take on routine but essential additional tasks themselves. Senior managers report spending hours each week collating routine reports manually.

Performance and Performance Monitoring

Operational managers are reliant upon relevant, accurate and timely data to assist them in monitoring performance and in planning activities. Having reports on-line makes that task so much easier and reports produced centrally by the IT function must be designed to meet these needs. This applies to most aspects of operational activity and the benefits would be significant in terms of improving efficiency and reducing work pressures.

The impact of frequent changes to priorities in-year is very disruptive and does not serve HSSD well by distracting managers from their operational commitments and stalling progress towards maintaining and improving services on a daily basis.

The target for routine service delivery is in two parts:

- maximum 8 weeks from GP referral to consultant outpatient (OP) appointment
- maximum of 8 weeks from consultant OP appointment to interventions/treatment.

If for any reason a patient appointment/admission is cancelled (other than by patient choice) then a new appointment must be offered within 28 days.

Whilst this review has not been able to investigate them in depth, the following areas require examination:

- Theatre Utilisation – sessions available and sessions cancelled / list start and finish / number of patients per list / cancellation rates and causality / booking process and appropriateness thereof / relative procedure times / patient pathway through theatres / Day case capacity and utilisation
- Outpatients – total OP capacity at PEH / clinics available and clinics cancelled with causality / clinic profiles by consultant and specialty / start and finish / patient cancellations and DNAs
- Bed utilisation – bed complement and staffed beds available / throughput by specialty / ALOS by specialty and procedure / emergency v elective admissions / delayed discharges and causation / occupied bed days.

Some observations are noted below.

Theatre Utilisation

Four theatres offer 40 planned sessions capacity per week. One theatre is kept for emergencies only, leaving 30 sessions for planned surgery. Of these, 27 are allocated. The Theatre Manager monitors utilisation, and theatres appear to be busy, but cancellations and other list changes occur frequently, often at short notice, and this makes managing lists very unpredictable. At the same time, there appears to be considerable variation in the time taken to list patients – some a few days, others 6-7 weeks. Lists can contain not only a mix of elective and private patients, but also inpatient and day cases. It is then a frequent occurrence that day cases, which should be at the front of the list, find themselves towards the end and they then needlessly become inpatients by default.

The root problem is that theatre management does not control the lists. These are generated externally by MSG consultants, with PEH theatre staff in a reactive position. There is no management control over decisions to admit and to coordinate this with booking the theatre slot. Operations are cancelled because a bed is not available. It appears that some patients booked for ITU beds do not really need them, and some booked for inpatient admission only need day care. The interests and incentives of the two organisations do not coincide as they would if all employment was under one organisation. Until that is achieved, improved protocols may help, but what the system really needs is a medical director to adjudicate and liaise with MSG consultants with authority and credibility.

MSG consultants may also bring their own theatre assistants who are then working with the PEH theatre team but responsible to the consultant. This can never be a happy arrangement.

More all-day lists would offer efficiencies but negotiating these is not facilitated under the current MSG contract arrangements. Private patient activity generated by MSG consultants will also impact significantly on list management. Lists are often mixed and it is again a matter of negotiating to get a balance between elective and private patients' demands. There is evidence that some surgeons may be operating less than optimally but unfortunately, access to job plans was not possible at this time, assuming these actually exist.

Outpatients

There is considerable inconsistency in the date given for first OP appointment, and to subsequent date of admission. Some patients are given an appointment within a few days, others end up with appointments outside the target of 8 weeks (indeed there is a similar situation for those patients requiring a date for admission).

If a patient unwittingly accepts a date outside of 8 weeks then this is regarded as 'patient choice' and does not breach the 8 week target. There appears to be a lack of understanding of this on the part of patients. The degree to which this offers some convenience to consultants should be examined, as should putting in place easy access to relevant information to patients but this is not so easily done when the bulk of OP work is done by MSG consultants outside of PEH in MSG's own facilities at Alexander House.

The payment of GPs by per item of services they provide creates an incentive for patients to want referral to a consultant outpatient clinic where they are not charged. As a result, referral rates are relatively high compared with those in England. Outpatient attendances in 2012 totalled 74,300 compared with an expected level of around 40,000. Some Specialty Reviews have noted a tendency for unnecessary referrals.

Whether or not a contractual arrangement remains after expiry of the current MSG contract, all OP activity should be moved to PEH. We understand there is space for this once some refurbishment is done. This would be a much more cost-effective solution for the future: it would save on contract costs (if a new contract was entered into), eliminate staff duplication, achieve better access to diagnostics, and make better use of accommodation already available and maintained at PEH.

Bed Utilisation

Admissions to beds arise from direct GP admissions - usually via A+E but also from the Out-of-Hours service and from theatres. As mentioned above, theatres do not themselves control or influence the

numbers nor case mix of patients going to theatre so there are often excessive demands on the available beds given that emergencies also have to be accommodated. This contributes to the excessive number of cancellations observed (average of 2-3 weekly) and is reflected in the noticeable increase in cancellation-related complaints.

Delayed discharges are a frequent problem and are largely attributed to issues within Social Services and with the availability of carers. However, it is recognised that more could be done from within PEH to improve discharge planning based upon the predictability of recovery times for almost all elective procedures whether private or public. Post-operative discharge rounds undertaken by consultants are infrequent, resulting in a tendency towards extended lengths of stay.

A positive drive towards improving this might be based upon:

- improving the attendance of surgeons post-operatively to expedite discharges
- further introduction of the enhanced recovery programme
- drawing up a 'nurse-led' discharge protocol
- improving advanced planning with Social Services and receiving carers.

The fluctuation in available beds does not promote efficiency, especially when it is not conjoined with elective admissions, and peaks and troughs will inevitably occur. Subsequent overspill into Victoria Ward reduces the private patient capacity thus reducing income potential for both PEH and consultants. Consultants will become disenchanted with that and may then find themselves faced with difficult decisions as to which patient gets the available bed. Private patients may look elsewhere, and that means off-island - a scenario in which everyone loses.

Operational issues and challenges

Care Pathways and Protocols

In some cases these are not well defined and errors occur resulting in inappropriate outcomes – at this time we have no evidence that any harm has actually occurred as a result but these are a key indicator for clinical safety and governance as well as efficiency. Priority should be given to ensuring that these are in place and that they are effective.

Examples of poor pathways currently are those for head injuries and major trauma. Even some booked admissions are cancelled because patients that are fit enough for discharge from ICU block a bed needed for a planned admission for want of a timely clinical decision.

Discharge Planning

As previously mentioned, this is not adopted robustly across the wards. Given that there is a large element of predictability about LOS for most procedures, discharge planning should begin even before patients arrive for admission. This would anticipate challenges to a timely discharge and allow more time to effect a solution.

The 'expected discharge date' (EDD) is not always entered into the patient record at time of admission which immediately removes a useful prompt. If it is entered and later changes, the system does not accommodate the change which causes confusion.

Protocols for nurse-led discharge should be universally adopted across all wards and departments and this will go a long way towards overcoming the issue. However, a much more effective and flexible solution would be to also create a 'resident doctor' role.

Clinical Governance and Clinical Audit

Clinical data collection is driven almost exclusively by MSG. This is not appropriate as HSSD may be vicariously liable for the acts or omissions of consultants whose practices they have neglected to regulate and monitor. This potential risk has been alluded to in the recent RCS report, and a number of the other recent reviews have also identified the need for closer working, shared data and medical supervision in the form of a medical director.

To date, many of these data collection or procedural exercises require the active input of HSSD staff which is not resourced and which becomes an additional activity or cost pressure. It may be that MSG is already collecting similar data and not sharing it which would mitigate any additional collection costs for HSSD – the questions need to be asked.

Multi-disciplinary team activity, or lack of, has been observed on a number of occasions and again, closer working will bring benefits to patients across the all specialties, improving patient management, experience and outcomes, and perhaps even reducing costs by avoiding waste and unnecessary investigations and procedures.

Contract Monitoring

Because the current contract leaves the initiative with MSG, issues for HSSD may not be addressed until they become of real concern. Contract performance meetings do occur but do not currently involve the operations managers so there is not the opportunity to respond to any concerns about services (perhaps other than waiting times) from either party. This is an opportunity missed as the operations managers can bring first-hand knowledge of conditions and circumstances which business/contracts managers cannot.

Ward Staffing Levels

Appendix 6 shows the establishments, actual and recommended, for selective wards following an exercise earlier in 2012 which involved representatives of the UK University Hospitals Association. Principally, the medical wards appear to be running at a level significantly below that recommended. This situation should be studied as a matter of some urgency to ensure that there are appropriate levels of registered and unregistered nurses so that the needs of patients are met.

Complaints and Compliments

2012 showed a decrease in the total number of complaints compared with 2011 (144 compared with 161). The salient points are:

- an increase in those relating to SUHT and to response times
- patients being unaware of being classed as private until invoices arrived
- delays in accounts being received by patients
- significant increase in the numbers of patients being sent off-island and subsequent conflicts re reimbursement charges
- Increases in OP and theatre cancellations (especially orthopaedics).

It was noticeable that complaints regarding general medicine (as opposed to surgical specialties) had increased whereas every other category saw a decrease. There is no explanation for this at this time. Cancellations significantly increased as did waiting times which should be investigated. A large number of complaints centred around communication and staff attitude, and there is clearly a need to focus more on patient perception, expectation and understanding, especially with respect to recharging policy and private patient classification. Among the 159 letters of compliment and commendation (129 in 2011), the ED and Day Unit were frequently applauded by service users for their efficiency and positive attitudes.

Staff Morale

There were several strong views expressed regarding the usefulness of strategic leadership and the overwhelming number of priority issues being delegated to managers. The consensus was clearly that the number of 'fires burning' was too many and more control and prevention was needed. This was a direct reflection of the many strategic initiatives that are undergoing concurrent implementation and which are not delivering their expected benefits. The cumulative effect was crisis management, with high pressure and stress being imposed on middle and senior managers. This not only dampens morale but also leads to breakdowns in efficiency as progress across departments becomes very inconsistent, and goal posts get moved which undermines the credibility of and confidence in top management.

Service Development Opportunities

Private patient unit

This should be a money earner. However, the original 19 beds of Victoria ward have been reduced to 10 ring-fenced for private patients with the balance being available for clean orthopaedics and other cases such as termination of pregnancies which are often done at weekends. Ring fencing of the entire ward might be considered to ensure that its income generating capacity is optimised. This should be considered in greater depth.

We have projected a need for 143 beds in total, based on average NHS performance, whereas PEH has 146 open at present. Both PEH admissions data and NHS data include private admissions (and the number of admissions to non-NHS private beds, although not known, is thought to be very small compared with the NHS numbers) so we are comparing like with like broadly.

If PEH were to reallocate to private patient use, the 9-10 beds in Victoria that are at present being used for orthopaedics then this implies an increase in caseload overall as the newly available private beds become occupied, and an increase in caseload for the rest of the hospital as orthopaedic and other cases are transferred. It is questionable, however, whether PEH needs to reopen the 15 bed De Sausmarez ward to handle this. Bearing in mind that our analysis suggests that lengths of stay are 20% higher than benchmark projections (and that Capita said they could close 17 beds), the ambition should be to absorb the increased caseload through more efficient bed management. Data problems apart, there are some indications that PEH day case ratios are better than NHS averages, so that PEH inpatient admissions may well be less than the modelled benchmark figure, which is what the data suggests. This also suggests that PEH needs fewer beds than the modelled total. With De Sausmarez ward remaining closed, emphasis can then be placed upon optimising throughput on the remaining bed complement while also assuring the consultant body of optimising access for private patients.

Moreover, opening the De Sausmarez ward will have substantial cost implications making it unaffordable in practice. The nurses who used to work on that ward are now working elsewhere in the hospital, no doubt filling gaps in the staffing pattern, so that reopening the ward would mean creating a new 24/7 nursing team which would be a substantial extra cost. Staffing a 15 bed ward requires almost as many nurses as staffing a 25 bed ward - another instance of the diseconomies of small scale.

If in the future, HSSD were to identify significant potential reductions in selected overseas referrals by repatriating patients for care on island, this equation may change and an increase in beds may become needed.

Business Planning

It is also suggested that a planning coordinator role might assist with the transition to improve the quality, consistency and timeliness of the outputs of the planning cycle which will better inform forward planning capability and ensure that accurate and timely planning submissions and business cases are available in a timely manner. Such a precedent already exists for Pathology.

4. Summary and recommendations

Summary

Significant data deficiencies make it impossible to calculate the extent to which the secondary and tertiary care system is dealing with the workload the population is expected to generate. Overall inpatient admission are 91% of those expected, but the deficit is likely to be caused by under reporting. Day cases are not reported in ways that facilitate comparison with benchmark rates. From observation, there is no reason to believe that the service is not meeting needs for hospital care in any significant or serious ways.

In terms of process, available data indicates over-long average lengths of stay (ALOS) and low bed occupancy rates, but these would follow from the deficiencies in admissions data.

We have not been able to obtain sufficient quantitative data with which to assess the quality of outcomes. An external review of ICU records good standardised mortality rates, and several other Specialty Reviews note good or reasonable standards of care (see Appendix 1).

The aspect of efficiency of most concern is that of what the system costs. The secondary and tertiary care system is more expensive than it should be. Replacement of the existing contracts with direct employment staff could save £6.2m pa, mainly by reducing the price and number of consultants (whilst increasing the numbers of non-consultant levels doctors), and by eliminating duplication of support and accommodation costs. There is no credible evidence that this would reduce the quantity or quality of services delivered to patients, and every indication that it would produce improvements by reducing organisational and management problems for the hospital as discussed in Section 3 earlier.

Such an integrated organisation would then be able to achieve further efficiency savings – our analysis indicates that even with integrated employment, costs would still be £3.26m above what should be achievable with benchmark staffing and organisation. Partly, this £3.26m excess results from an imbalance in staffing, with excessive numbers in facilities management and administrative roles but with a deficit in nursing. Part of the latter also results from the contracting model: whilst PEH employs approximately the benchmark number of administration and clerical staff of 129.1, MSG employs a further 68.0 FTEs (Table 4).

Recommendations

Significant structural change is needed in the Guernsey health care system to create a coordinated service with common incentives for quality and cost efficiency. Improvements in efficiency and quality require structural changes in the way the various parts of the health care system operate and inter-relate. This requires changes in the ways providers are contracted and remunerated, and starting with primary care where a major shift is required from fee-for-service to payment for results including prevention activities. In secondary care, consultants must become an integral part of the clinical and management team, with concurrent interests, incentives and targets, and jointly ensuring clinically effective and cost-efficient patient pathways through the spectrum of prevention, care and management. This is best achieved with consultants, clinical, technical support and management staff working in one organisation.

Guernsey must now seek a solution to how a better organisational structure is achieved. Options range from employing consultants directly as part of the PEH structure within the public sector to setting up PEH as an independent contractor to HSSD with consultants employed by that organisation – and there are various ways in which these could be structured in detail. Options are needed too for primary care and range from the improved operation of a fee-for-service system, through forms of health maintenance organisation in which primary and secondary care are part of one organisation, to a full capitation payment system with incentive payments for defined prevention work.

These options should now be investigated in detail as a matter of urgency so that a politically acceptable solution can be designed and implementation begun before the date when notice of the existing contracts must be given in 2015. This will require a combination of detailed study of options and implications, and of negotiations with all parties. The initial steps of implementation should be taken as part of this study and negotiation period. These should focus on getting the key drivers of change in place so as to create incentives for the various components of the health system to seek further improvements through common goals.

Part of this requires a restructuring of the roles of HSSD and SSD, with HSSD developed as the knowledgeable commissioner and contractor of services led by in-house medical knowledge and supported by in-house financial management. Development of this commissioning role and capacity will be a key driver of change to ensure performance from providers whether public or independent, and including overseas care providers. The role of SSD should be that of raising finance and ensuring probity.

At the same time, HSSD and PEH could consider the internal operational issues outlined in Section 3 of this review with a view to achieving improvements in service efficiencies and in staff morale.

HSSD might also consider commissioning a study of the main data gaps highlighted by the review so as to prepare a solid foundation for the larger structural change study outlined above and, of course, to assist PEH and HSSD in obtaining much-needed management data sooner rather than later.

Annex A: Modelling hospital activity, bed requirements and staffing: the benchmark hospital

Our projections of inpatient admissions and day cases expected in Guernsey, and the beds needed to process these, derive from a benchmark model based on NHS performance in England during the 2011-12 financial year. The model incorporates a database of the total numbers of admissions and day cases, and average lengths of stay, in each of the specialties recognised and recorded in the NHS, in each of seven age bands. These data, together with the age breakdown of the population of England, enable calculations to be made of the admissions and day case rates per 1,000 population in each specialty and age band.

These rates can then be applied to the age structure of Guernsey, to determine the pattern of specialty caseloads that would occur in Guernsey if its health services performed in the same way as the NHS. In order to make the projections realistic adjustments were made for the difference in birth rate between England and Guernsey, and for the proportion of patients in each specialty who are treated overseas – see further explanation below.

It is implicit in this approach to projecting caseloads that the population of Guernsey is assumed to be similar to that of England in terms of its vulnerability to ill health and its propensity to seek treatment for it, in each of the seven age bands.

Adjusting for age

The age bands used for the purpose of modelling are as follows:

0	-	4
5	-	14
15	-	44
45	-	64
65	-	74
75	-	84
85	+	

Each of these age bands has its own characteristics in terms of the need for health services. However, in recent years activity data provided routinely by the NHS has been grouped in four age bands, as follows:

0	-	14
15	-	59
60	-	74
45	-	64
75	+	

These groupings are considered to be too broad for health planning purposes. We therefore made use of fully disaggregated data from an earlier version of the model to estimate the breakdown of the 2011-12 caseload within each of these four bands into the seven bands listed above. This process of estimation may have led to some inaccuracies in the projections which, however, are not thought to be significant in the context of this review.

Adjusting for the outflow of patients

We have been provided with data on the numbers of overseas referrals requested, and those actioned, by specialty and mode of care, ie. inpatient or outpatient. Interpretation of these data - in terms of the proportion of the total caseload that they represent - is not straightforward.

Firstly, it is known from various studies of island health services that there is a 'distance effect' such that some of the expected caseload tends to be lost when patients have to travel off island, even when the care is free of charge and the travel costs are met. This distance effect is found also in

health services serving remote communities whose populations need to travel significant distances to access care. In the case of Guernsey, it is probable that an (unknown) proportion of the population make their own arrangements when overseas care is needed, and are therefore not included in the HSSD database. The database itself shows that there are more referral requests than actioned referrals, which again suggests that there is a 'missing caseload'.

Secondly, comparison between the projected and recorded caseloads yields anomalous results which complicate the assessment of the percentage of total caseload that is handled off island. It might be expected that a specialty that sends a significant proportion of its patients overseas would have an on island caseload slightly below the unadjusted projected level. However, this is not always the case: some recorded caseloads are too far below the projected level for the difference to be wholly explained by overseas referrals, and others have higher than expected caseload in spite of the presence of overseas referrals. In part these problems arise from a blurring of the boundaries between specialties: in a hospital such as PEH, with a limited range of specialists, some procedures may be undertaken by a generalist with special clinical interests rather than a fully fledged specialist as would normally be the case in a large NHS hospital. As a result, activity rates in the major specialties may not be strictly comparable with their equivalents in the NHS, although of course the total level of inpatient activity would not be affected by these issues of definition.

Finally there is the issue of inpatient versus outpatient care. It is not necessarily the case that a patient treated as an inpatient off island would have been treated as an inpatient on island, had the care been available there. Conversely, an off-island outpatient cannot be compared with an on-island one, because this patient may become an inpatient in due course.

For all of these reasons we have made our own assessments of the proportion of the expected caseload in each specialty that is either handled off island or is lost altogether as a result of the distance effect. These assessments were based on an overview of all of the evidence we have seen, plus our general understanding of the likely pattern of events in a situation such as Guernsey's. The figures are listed below.

SPECIALTY	% OUTFLOW
General Medicine	0%
Paediatric Medicine	15%
Geriatric Medicine	0%
Cardiology	75%
Chest Medicine	0%
Dermatology	5%
Gastroenterology	75%
Genito-urinary Medicine	100%
Infectious Diseases	100%
Nephrology	15%
Neurology	100%
Oncology	15%
Rehabilitation	0%
Rheumatology	95%
Other Medical Specialties	100%
General Surgery	10%
Trauma & Orthopaedics	20%
Cardio-thoracic Surgery	100%
ENT	20%
Neurosurgery	100%
Ophthalmology	25%
Oral Surgery	90%
Paediatric Surgery	100%
Plastic Surgery	100%

Radiotherapy	100%
Urology	25%
SCBU	0%
Obstetrics	0%
Gynaecology	20%
Accident & Emergency	0%
Anaesthetics	0%
Pathologies	75%
Radiology	20%
Adult & Child Psychiatry	10%
Old Age Psychiatry	0%
Mental Handicap	0%

The effect of these assumptions is to reduce the projected caseload by about 35 percent by comparison with what would be expected if the island were totally self supporting in health services. The projected loss of about 7,000 cases compares with the HSSD record of about 600 actioned NHS inpatient referrals and 2,100 outpatient referrals in 2012. This large difference between the two sets of results points up the issue of lost, or privatised, caseload. In spite of this difference, it can be seen from Table 2 in the main report, that there is a close match between the total recorded and projected inpatient and day caseloads, even though there are significant differences in individual specialties, as discussed in the main text.

Day cases and day patients

The projections for day case workloads in each specialty derive from the model's database in the same way as that used to project inpatient admissions, as described above.

Unfortunately, the data provided to us on existing PEH day cases by specialty, for purposes of comparison, was based on a definition of a day case different from that used in the NHS, which obscured comparison between the two sets of figures. The PEH figures include activity that in the NHS would be recorded elsewhere. For example, the day case figure for nephrology clearly includes repeat attendances for dialysis. The actual patient numbers are much lower. Similarly the oncology day case total clearly includes repeat visits for chemotherapy, and again the actual patient numbers are much lower. The gastroenterology caseload includes 600 bowel screenings which are presumably part of the imaging caseload. There may be instances in other specialties where the definition of a day case is broader than that used in the NHS and elsewhere. As a result, the difference between 12,515 day cases recorded and 3,660 projected does not tell us whether PEH has succeeded in shifting more work to day care than the average NHS hospital.

Therefore the day patients and diagnostic activity included in the specialty data set needed to be separated out to allow meaningful comparison with the projections for day case activity. To facilitate the necessary disaggregation we made use of a ward based breakdown of day cases and day patients provided to us for this purpose. Because the data are ward based the specialty groupings are broad and do not match the normal detailed specialty codings. Also, the totals do not match the total caseload figure on which the rest of the analysis is based. Nevertheless we were able to use the data to make estimates of the proportions of day cases and day patients in each of the specialty totals for day cases plus day patients. Our estimates are summarised below.

- Geriatrics, oncology, nephrology, obstetrics, anaesthetics, psychiatry - all of the day case plus day patient totals in these specialties are to be treated as day patients. There are, therefore, no day cases.
- Gastroenterology – it was estimated that 80 percent of the day case plus day patient total is diagnostic activity not normally treated as a patient 'case'. The remaining 20 percent are day cases.

- Paediatrics – 45 percent of the day case plus day patient total is day patient activity, the remaining 55 percent being day cases.
- All other specialties – 20 percent of the day case plus day patient total is day patient activity, the remaining 80 percent being day cases.

This analysis results in a total of 4,968 day cases and 7,553 day patients and diagnostic activity – see Table A1 below. The day case estimate is thought to be a credible estimate, supporting the view previously expressed to us that the hospital has a better day case ratio than the average NHS trust in 2011-12.

Table A1: PEH existing day patient and day case estimates

PEH existing caseload				
Specialty	Estimated		Day patients + day cases	Inpatients
	Day patients	Day cases		
General Medicine	148	593	741	2,526
Paediatric Medicine	84	102	186	1,121
Geriatric Medicine	4	0	4	22
Cardiology	5	18	23	16
Chest Medicine		0		0
Dermatology		0	0	1
Gastroenterology	1,414	353	1,767	121
Genito-urinary Medicine		0		0
Infectious Diseases		0		0
Nephrology	2,574	0	2,574	77
Neurology		0		0
Oncology	1,808	0	1,802	306
Rehabilitation		0	0	259
Rheumatology	5	18	23	1
Other Medical Specialties		2	2	0
General Surgery	280	1,119	1,399	1,266
Trauma & Orthopaedics	140	559	699	915
Cardio-thoracic Surgery		0		0
ENT	85	342	427	378
Neurosurgery		0		0
Ophthalmology	140	561	701	49
Oral Surgery	32	128	160	11
Paediatric Surgery		0		0
Plastic Surgery		0		0
Radiotherapy		0		0
Urology	102	410	512	168
SCBU		0		0
Obstetrics	61	0	61	794
Gynaecology	168	670	838	363
Accident & Emergency		0		0
Anaesthetics	456	0	456	279
Pathologies		0		0
Radiology	23	93	116	16
Adult & Child Psychiatry	22	0	22	285
Old Age Psychiatry	2	0	2	152
Mental Handicap		0		0
Totals	7,553	4,968	12,515	9,126
Totals excluding psychiatry	7,529	4,968	12,491	8,689

Modelling bed requirements

The projections of specialty inpatient bed requirements from the projected inpatient admissions derive from the age and specialty specific average lengths of stay contained in the model database, plus specialty specific assumptions/targets for turnover intervals. The use of turnover intervals rather than occupancy rates is thought to be a more satisfactory approach because the turnover interval is a generally sound measure of managerial efficiency whereas occupancy is a secondary derived result. The use of age specific lengths of stay is necessary to demonstrate the impact of differences in age structure: older people tend to stay longer in hospital, so that hospitals serving populations with a

high proportion of older people tend to need a larger number of beds per 1,000 population. In the case of Guernsey, allowing for the outflow of some specialty work as well as the age structure, the projected acute bed index is 2.27 beds per 1,000 population, excluding psychiatry.

Day case requirements have been projected on the assumption that the day case unit operates 10 half day sessions per week, and that 50 percent of day cases can be processed within a half day session, with the other 50 percent needed a full day's care, ie. two sessions. An occupancy rate of 75 percent is assumed, which allows for timetabling issues, including fluctuations in caseload and the availability of surgeons and other specialists who make use of the day case beds.

Modelling staffing needs

Medical Staff

The staffing projections are based on the specialty workload projections, and involve the use of specialty specific throughput rates derived from the NHS in England in 2011. As with the disaggregation of 2011-12 NHS hospital activity, discussed above, there was a need to further disaggregate the total numbers of hospital specialists routinely provided by the Department of Health. Again use was made of an earlier version of the model to disaggregate totals to individual specialties. This means that there may be some inaccuracies in the detailed projections. The total numbers of consultants, registrars and other grades is correct, however, and reflects the current structure of the medical profession in England.

For the purpose of the projections, throughput was defined in terms of the total number of cases, (inpatient and day case) per consultant, in each specialty. Allowances for registrars and other grades were then added in the same proportions as exist in the NHS. It should be noted that in purely numerical terms the NHS is not as productive as once it was, as limitations on working hours, and training requirements, have reduced the numbers of patients that it is feasible for a doctor to handle in a year. This has led to a more civilised life style for some doctors and, arguably, to an increase in the quality of care. This means that on average a hospital consultant, plus his team of junior doctors, will handle 460 inpatients and day cases per annum, plus their associated outpatient clinics.

Nursing Staff

Projections for hospital nursing staff have been made on the basis of the population structure served. The numbers broadly reflect the position in the NHS in England in 2011, including the major increase in the numbers of qualified nurses over the last ten years or so. However, numbers of nursing assistants, including auxiliary and unqualified nurses, are understood to have remained broadly stable in relation to population numbers in recent years.

It is recognised that in a small hospital such as PEH scale effects can arise in relation to the staffing of wards with small numbers of beds on a 24/7 basis. These scale effects can increase the numbers of nurses required. No account of this is taken in our modelling, so the numbers presented should be regarded as the minimum feasible staff complement.

Professional, Scientific and Technical Staff

Staffing for these categories has also been projected on the basis of the population served. The ratios for each category of staff include adjustments for the increases over the last ten years or so in the NHS in the numbers of imaging and pharmaceutical staff, and the reduction in diagnostic laboratory technical staff, reflecting the impact of automation on laboratory work.

Facilities Management Staff

Projections for these categories are based on the projected bed numbers, with staffing levels reflecting those planned by a private finance initiative (PFI) in England (more efficient than the average NHS service but still achievable).

It is acknowledged that in NHS hospitals many of these services are procured in part or in whole from external contractors, and that this reduces the numbers employed directly by the hospital. This issue

is however not relevant to our PFI based projections because PFI contractors are responsible for providing all of the necessary staff.

Management, Administration and Clerical Staff

Projections for these categories are also based on the projected bed numbers, using ratios derived from NHS staffing levels.

Appendices

These are provided in a separate document

Appendix 1: Specialty Reviews and other documents

Appendix 2: Acute Services Management Structure

Appendix 3: SWOT Summary and Priority Schedule

Appendix 4: HAQU Commendations from Operational Plan

Appendix 5: HAQU Recommendations from Operational Plan

Appendix 6: Ward Staffing Levels as recommended by UK University Hospitals Association (UKUHA)