

**SWANSEA BAY UHB**  
**ANNUAL PLAN 2021/22**  
**URGENT AND EMERGENCY CARE PROGRAMME**  
**STEP UP STEP DOWN PROJECT**  
**VIRTUAL WARD**

**PART 1 – PROJECT ASSURANCE SUMMARY**

**A. KEY PROJECT INFORMATION**

<b>Name of Project</b>	Step Up Step Down – Establishment of an Enhanced Virtual Ward across 4 Clusters.
<b>PMO Reference No</b>	
<b>Project Lead</b>	Dr Anjula Mehta
<b>Delivery Unit/Corporate Department</b>	Whole System
<b>Name of Programme Board</b>	Urgent and Emergency Care
<b>Name of Programme Board Chair</b>	Rab McEwan
<b>Date of Programme Board Approval</b>	Click or tap to enter a date.

**B. BUSINESS CASE SCRUTINY**

<b>Date Case Received for Scrutiny</b>	Click or tap to enter a date.
<b>Is the case included within the Health Board's Annual Plan?</b>	
<b>Has funding been identified (Revenue &amp; Capital)?</b>	
<b>If the case requires the sign-up of other parties, has this been provided?</b>	
<b>Does the case contain a realistic benefits realisation plan?</b>	
<b>Does the case contain a realistic workforce plan?</b>	
<b>Has the case received financial clearance?</b>	
<b>Date Case Released from Scrutiny</b>	Click or tap to enter a date.

**C. BUSINESS CASE APPROVAL DECISION**

<b>Date of Approval</b>	Click or tap to enter a date.
<b>Business Case Assurance Group Decision</b>	Choose an item.

Annual Plan 21-22 Programmes of Work (select one)	
<input type="checkbox"/>	Cancer
<input type="checkbox"/>	COVID-19 response, including vaccination and testing
<input type="checkbox"/>	Maternity, Children, and Young People
<input type="checkbox"/>	Mental Health and Learning Disabilities
<input type="checkbox"/>	Planned Care,
<input type="checkbox"/>	Quality and Safety
<input checked="" type="checkbox"/>	Urgent and Emergency Care,
<input type="checkbox"/>	Workforce

Please restate the agreed GMOs		
GOALS (what are we trying to do)	METHOD (how are we going to do it)	OUTCOME (what will it deliver)
Implement an integrated Medicine for Older People pathway across SBU to - Support Older people to live well in the community - Improve management of complex co-morbidities, frailty, falls, and dementia - Provide rapid support close to home at times of crisis - Deliver good acute hospital care when needed (including surgery), - offer high quality rehabilitation and re-ablement after acute illness or injury including good discharge planning and support, - Offer choice , control and support towards end of life - Reduce negative impact of avoidable hospital admissions and long lengths of stay on older people's physical and mental wellbeing	Establish Cluster based Virtual Wards	20,000 bed days saved per year (Lightfoot analysis ) Section 7 Strength and balance programme to prevent falls can reduce risk of falls by 54% impacting on reduced ED attendance and serious injury with associated morbidity and mortality

## 1.0 INTRODUCTION

The Swansea Bay UHB annual plan 2021/22, outlines the key goals, methods and outcomes (GMOs) for the Health Board for the financial year 20/21 and beyond. These priorities build on priorities outlined within the Clinical Services Plan, where there is a clear focus on an improved urgent and emergency care (UEC) system with a whole system approach to service for Older People and Frailty.

All components of the system need to work in harmony. Separate business cases have been, or are being, developed for the following components of the UEC system:

- **Urgent Primary Care Centre (UPCC)** – bids in with Welsh Government to continue supporting the Swansea UPCC and to develop a second UPCC in NPT
- Investment to support the development of the **integrated model for older people** – support on 20<sup>th</sup> May 2021 to proceed with recruitment to 4 consultant geriatrician posts was secured
- **Specialist palliative care** input – initial bid agreed to grow specialist palliative input to support community as well as hospital expertise
- Changes required at the **front door of Morriston** – Planning underway to consolidate front down acute medical assessment at Morriston

The models and associated benefits need to align across all components to ensure models, pathways and services work in unison and that quantifiable benefits, including financial savings are not double counted.

***This business case focuses on the investment and benefits associated with developing 4 virtual wards in 4 clusters (Bay, Neath, Cwmtawe and Upper Valley). The services and pathways within this business case will be developed to support and align with the other key components of the urgent and emergency care system.***

## 2.0 CASE FOR CHANGE

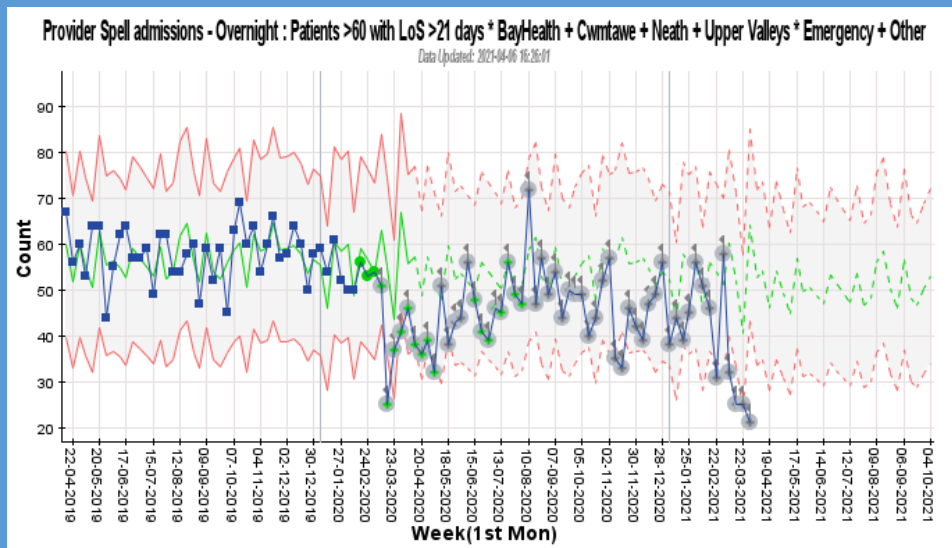
Lightfoot Solutions have supported with some data analytics which underpin the case for change. The key messages around opportunities for 2 cohorts of patients are summarised below:

### IDENTIFYING THE PATIENT COHORTS

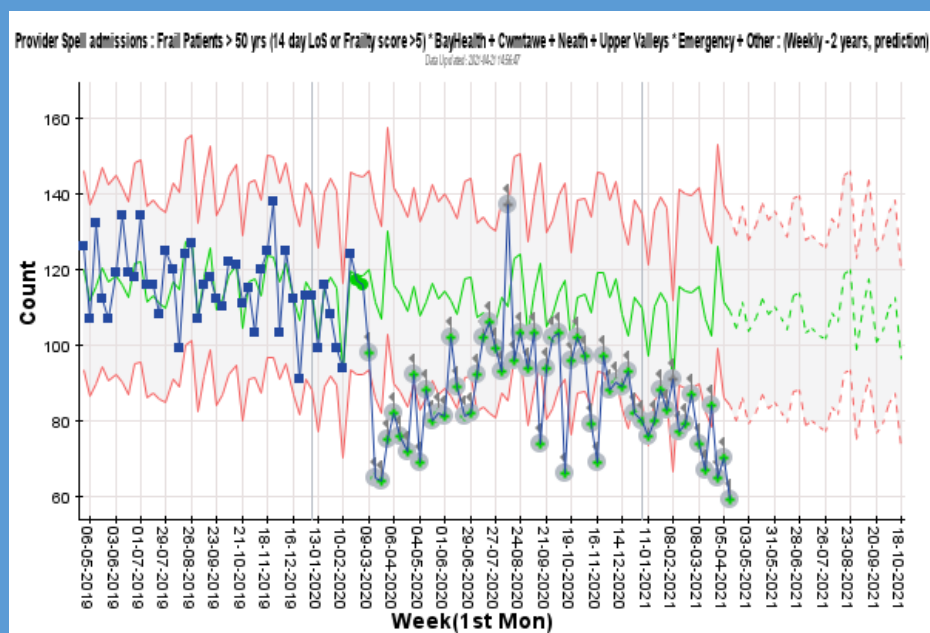
- ✓ Implementation of a virtual ward model is likely to benefit patients who are both pre-frail and acutely frail.
- ✓ It is possible to identify a cohort of patients likely to be either pre-frail or acutely frail based on the current patterns of attendance and occupancy in the UHB.
- ✓ Patients over the age of 60 accessing SBUHB start to have an extended LOS on admission.
- ✓ A significant number of patients over 60 years of age stay over 21 days when they are admitted. This indicates a strong likelihood of these patients being pre-frail or already frail.
- ✓ The first cohort (cohort 1) of patients is therefore any patient over 60 years of age who has been admitted and experienced a LOS over 21 days at any point in the last year.
- ✓ Each of these patients may have been admitted multiple times, but on at least one occasion they stayed over 21 days.
- ✓ They are our pre-frail or frail patients who are likely to benefit from the virtual ward outcomes of:
  - Reduced attendances in ED
  - Reduced LOS on admission
- ✓ The second cohort of patients (cohort 2) is extended slightly beyond that described in cohort 1.
- ✓ Potentially frail patients now include patients aged over 50 who have experienced at least one LoS over 14 days OR a patient over 50 who has been admitted and experienced a Lancet frailty score of > 5 based on their inpatient diagnoses

## UNDERSTANDING ADMISSIONS FOR THIS COHORT

- Admissions for patient cohort 1
  - There are 4 GP clusters initially implementing the virtual ward.
  - Pre-COVID between 45 and 70 frail or pre-frail patients were admitted a week belonging to these clusters.
  - Post-COVID there are between 25 and 60 frail or pre-frail patients admitted a week for these clusters.



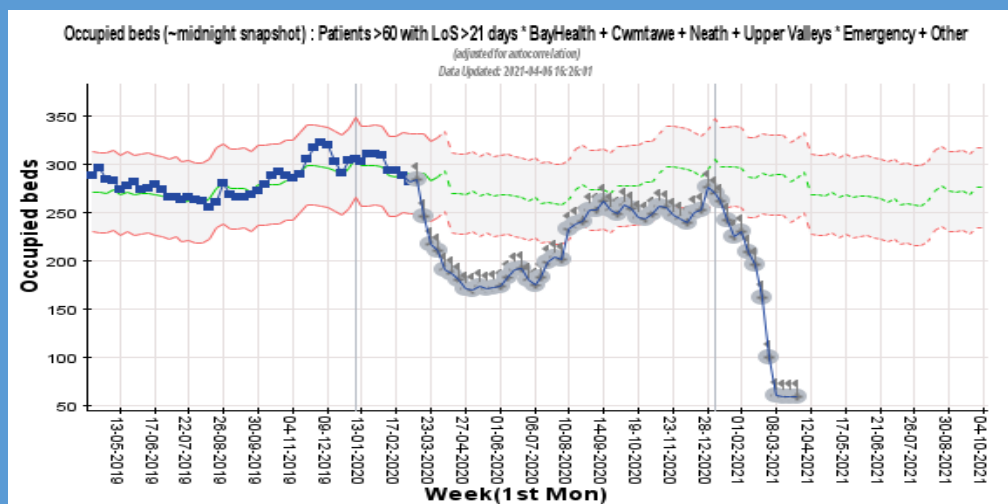
- Admissions for patient cohort 2
  - Across the four clusters there are currently between 70 and 100 frail patients admitted as emergencies each week (average approx. 90). This was higher pre-COVID but has not yet returned to those levels.



## UNDERSTANDING OCCUPANCY & BED DAYS FOR THIS COHORT

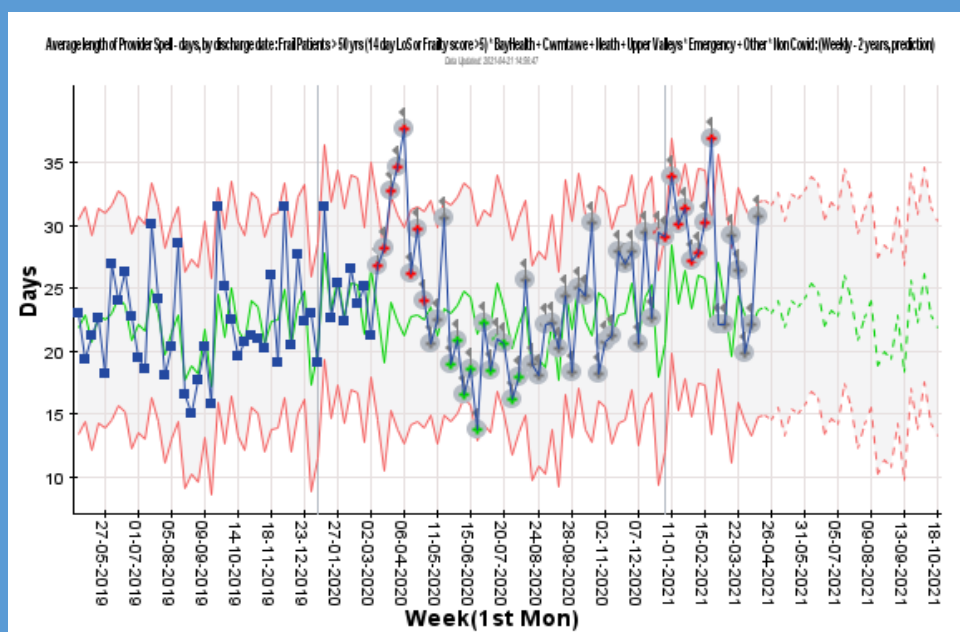
### Cohort 1

- The weekly admissions of frail or pre-frail patients from these 4 clusters result in a weekly bed occupancy of up to 325 beds pre-COVID and 280 beds post-COVID across the SBUHB system (18% of 1561 beds).
- Admitted frail or pre-frail patients from these 4 clusters resulted in an annual total of 104,000 bed days used in 2019 and 86,000 bed days used in 2020 (COVID).



### Cohort 2

- The average length of stay for frail patients admitted as an emergency is approx. 25 days.
- The distribution of the LoS shows that 12% of patients are discharged within 24 hours, 35% of patients are discharged with a LoS between 2 and 10 days and 47% have a LoS over 14 days.



## UNDERSTANDING PATIENTS AND ADMISSIONS

### Cohort 1

- In 2019-2020 there were 1950 frail or pre-frail patients in this patient cohort from the 4 clusters. These patients accounted for approx. 3200 separate hospital admissions.
- In 2020-2021 there were 1620 frail or pre-frail patients in this patient cohort from the 4 clusters. These patients accounted for approx. 2500 separate hospital admissions.
- In both years this equates to an average of 1.5-1.6 admissions per patient in a year.
- It is possible to identify how many of these patients from 2020 belong to each GP practice across the 4 clusters.
- Approximately 1% of each GP population belongs to this patient cohort.
- This will enable rapid identification and risk stratification of the patients who may benefit from the virtual ward in each cluster.

### Cohort 2:

- There are currently 4680 patients admitted per year within this patient cohort (average 90 patients per week).
- A number of the top ranking diagnoses for the frail cohort of patients admitted from this cluster group are those that can be managed safely and appropriately in primary and community care.
- This means that a proportion of these patients can be managed by the virtual ward instead of in an acute hospital.

### 3.0 PROPOSAL

In response to the case for change set out above and the vision for the Swansea Bay UEC system, this business case seeks investment into the development of 4 virtual wards and is based on premise that:

- By identifying patients in each GP cluster who are pre-frail or frail, providing them with step-up care, rapid pull from acute care to step down at home and improved management of chronic conditions, the virtual wards will contribute to a reduced number of attendances and admissions and decrease the length of stay in hospital for this patient cohort.
- By reducing admissions and reducing LOS, there will be a reduction in used bed days in SBUHB which equates to a potential cost saving.
- The investment made in establishing the virtual ward is likely to be less than the saving made by the outcomes and so it is a cost-effective intervention as well as delivering significantly improved patient outcomes.
  - Reducing the number of bed days used by this cohort 1 by 10% could save potentially 8,000-10,000 bed days per year and for cohort 2 by
  - The four virtual wards can each manage 40-50 patients at a time (160-200 total).

#### 3.1 Development of Integrated Virtual Ward Model in SBUHB

There are 4 key components of the Virtual Ward model:

- Risk stratification –identifying frailty
- Step Up – Admission Avoidance where appropriate
- Step Down – Facilitate safe, timely and supported discharge
- Chronic Conditions management

The key principles underpinning the Virtual Ward model are:

- Create capacity in the system, without increasing inpatient beds
- Facilitate earlier discharge and avoid admissions in the first case
- Stay on the Virtual Ward is time-limited, with agreed care plans/ outcomes at point of entry into Virtual Ward.
- Seamless health to social care transition, collaboration and co-ordination

The intended benefits and outcomes will continue to be iterated for alignment with other business cases but will include:

- Reduction of Inpatient bed days by facilitation of early discharges
- Reduction of admissions of patients with exacerbation of chronic conditions (heart failure and COPD)



- Reduction of attendances/admissions of 'frequent attenders'
- Reduction of attendances/admissions of
  - care home residents
  - patients with agreed ceilings of care/ end of life care
  - very frail/high CFS patients if clinically safe and agreed with patient/relatives
- Improved patient flow – front and back door
- Improved patient experience – PROMS/PREMS

### **3.2 Defining the Virtual Ward**

Virtual wards will be organised around the cluster structure and so will serve a population of approximately 50,000 from 3 to 8 GP practices. Patients requiring a multi-professional discussions and any new referrals will be discussed as part of the weekly virtual ward meetings. The caseload will include:

- Palliative /end of life patients
- Discharged patients requiring health or rehab input
- Patients with high frailty score, co-morbidities, frequent admissions identified by e-FI
- Frequent attenders
- (GP, ED, WAST)
- Patients with escalating health/care needs

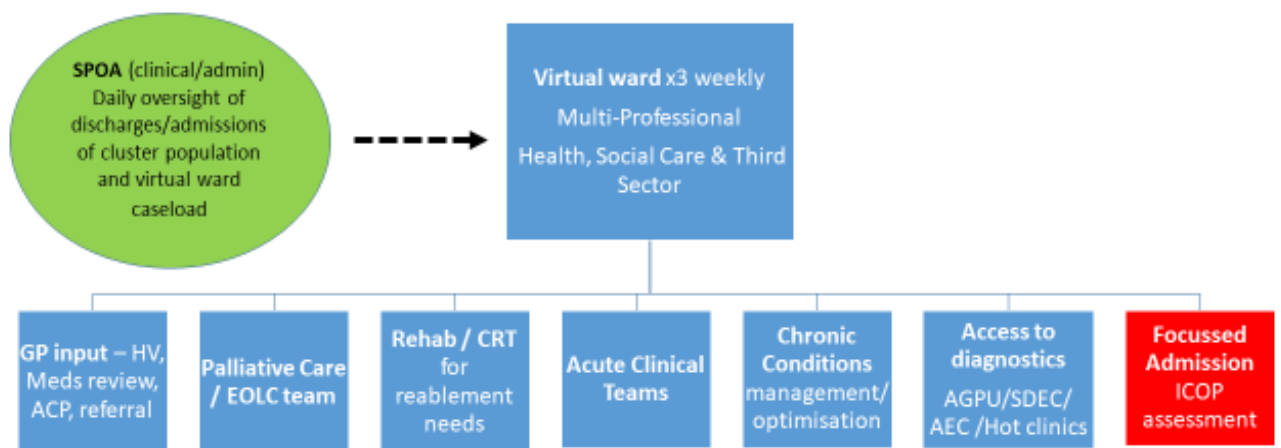
Multi-disciplinary team members will agree a bespoke care plan for each patient at the time of admission to the virtual ward. The virtual ward clinical manager will oversee completion of the care plan with support of the GP and the Cluster Geriatrician with the aim to discharge the patient within 5-8 days.

The virtual ward will be staffed from a cross section of professionals including:



In addition, dedicated professionals will be attached to the virtual ward to manage the caseload and complete agreed care plans.

A high level visual of possible actions and responses for patients in the virtual wards is given below:



The 4 key components of the virtual ward are set out in the table below. For each component the table identifies the aim (and therefore role of this element), the opportunity associated with this aim and the ask in terms of the business case.

COMPONENT	AIM	OPPORTUNITY	ASK																																																																	
RISK STRATIFICATION	To identify risk in the older population in order to delivery appropriate and relevant intervention	<p>Electronic Frailty Index (e-FI) is a tool that can be used to identify need and risk. It uses data from primary care information systems and uses a cumulative deficit model to identify risk. The tool has been clinically validated. Evidence shows that the timely intervention can reduce likelihood of progression along frailty score.</p> <div><div><div>45% not frail</div><div>35% mild frailty</div><div>15% moderate frailty</div><div>5% severe frailty</div></div><table><tr><td>Average length of stay per unplanned admission</td><td>13.5</td><td>23.4</td><td>36.4</td></tr><tr><td>Average number of GP contacts</td><td>10</td><td>14</td><td>18</td></tr><tr><td>Average number of different prescriptions</td><td>9</td><td>12</td><td>15</td></tr><tr><td>Average prescription cost per person</td><td>£650</td><td>£900</td><td>£1.2k</td></tr><tr><td>Average cost of unplanned admission cost per person per year</td><td>£1,119</td><td>£3,175</td><td>£5,800</td></tr><tr><td>Extrapolated cost of unplanned bed days across Scotland per year</td><td>£396m</td><td>£482m</td><td>£293m</td></tr></table><p>Extraploating leanring from Kent the tables below show the opportunity in SB</p><p>Swansea population</p><table><tr><th>Age</th><th>All People (%of total)</th><th>Mild</th><th>Moderate Frailty</th><th>Severe Frailty</th></tr><tr><td>65-69</td><td>13,000 (5.3%)</td><td>3,263</td><td>637</td><td>92</td></tr><tr><td>70-74</td><td>12,900 (5.2%)</td><td>4,088</td><td>1060</td><td>184</td></tr><tr><td>75-79</td><td>9,300 (3.8%)</td><td>3,494</td><td>1328</td><td>291</td></tr><tr><td>80-84</td><td>6,900 (2.8%)</td><td>2757</td><td>1425</td><td>435</td></tr></table></div>	Average length of stay per unplanned admission	13.5	23.4	36.4	Average number of GP contacts	10	14	18	Average number of different prescriptions	9	12	15	Average prescription cost per person	£650	£900	£1.2k	Average cost of unplanned admission cost per person per year	£1,119	£3,175	£5,800	Extrapolated cost of unplanned bed days across Scotland per year	£396m	£482m	£293m	Age	All People (%of total)	Mild	Moderate Frailty	Severe Frailty	65-69	13,000 (5.3%)	3,263	637	92	70-74	12,900 (5.2%)	4,088	1060	184	75-79	9,300 (3.8%)	3,494	1328	291	80-84	6,900 (2.8%)	2757	1425	435	<p>A Framework will be offered to GP practice to undertake the frailty risk stratification and identification of their respective practice populations.</p> <p>Each practice will undertake monthly reviews of the register to conider:</p> <ul style="list-style-type: none"><li>- Management of co-morbidities</li><li>- Review of admissions in last 12 months</li><li>- Falls risks</li><li>- Advanced Care planning</li></ul> <p>The table below shows the modelled costs for this</p> <table><tr><th>Cluster</th><th>Pop</th></tr><tr><td>Upper Valley</td><td>31,365</td></tr><tr><td>Neath</td><td>56,500</td></tr><tr><td>Bay</td><td>73,977</td></tr><tr><td>Cwmtawe</td><td>44,000</td></tr><tr><td>TOTAL</td><td>205,842</td></tr><tr><td>3% of cluster</td><td>6,175</td></tr><tr><td>@ £50 per patient</td><td>£308,763</td></tr></table> <p>This funding will come from existing primary care</p>	Cluster	Pop	Upper Valley	31,365	Neath	56,500	Bay	73,977	Cwmtawe	44,000	TOTAL	205,842	3% of cluster	6,175	@ £50 per patient	£308,763
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STEP UP – ADMISSION AVOIDANCE	Enhanced regional Acute Clinical team service to reduce number of avoidable admissions	<p>There are ACTs in both Swansea and NPT currently delivering acute medical care for older people living with frailty in the community as well as adults &gt; 18 who would benefit from ACT intervention in the community.</p> <p>A recent Service Review into both ACTs identified a number of opportunities to standardise approaches and ways of working and recommended a regional ACT (rather than 2 separate ones in NPT and Swansea) with consistent and standard approaches. These standards include:</p> <ul style="list-style-type: none"><li>- Homogeneous coverage (currently operate different times across NPT and Swansea)</li><li>- Same day response to referrals (28 Hours currently)</li><li>- Referrals received up until 8pm (from 5pm currently)</li><li>- Reviewing all Care Home referrals on WAST stack (not done systematically)</li><li>- Target Length of stay of 6 days</li><li>- Alignment to virtual wards</li></ul> <p>The strengthened regional model will support admissions avoidance through offering:</p>	<p>Current resources are not sufficient to provide the cover described in the standards. For the full option, additional resource of <b>£875k pa</b> are required to extend the cover of ACTs and allow them to provide a service to all patients and a specific link with 4 virtual wards.</p> <p>Reconfiguration to deliver a regional service in line with Service Review will continue irrespective of additional investment.</p>																																																							

		<ul style="list-style-type: none"> <li>- Support for patients with acute infections with need more intensive treatment eg IV antibiotics or patients that have additional complications such as fast AF</li> <li>- Exacerbation of heart failure needing intensive titration of medication including IVs</li> <li>- Low risk pulmonary emboli, deep vein thrombosis</li> <li>- Acute kidney injury requiring parenteral fluids and monitoring. Management of urinary retention.</li> <li>- Electrolyte abnormalities- hyper and hypokalaemia, hyper and hyponatremia, hypercalcaemia.</li> <li>- Unstable INR requiring close monitoring/IV vitamin K</li> <li>- Management of the older frail patient: <ul style="list-style-type: none"> <li>o Complex falls- long lie, recurrent falls, history suggestive of syncope, vertigo, history suggestive of myelopathy or lumbar canal stenosis</li> <li>o Acute Delirium</li> <li>o Deterioration in ability to function, worsening mobility, unexplained weight loss, needing a comprehensive Geriatric assessment</li> </ul> </li> </ul>	
<b>STEP DOWN – SAFE AND TIMELY DISCHARGE</b>	Aim to reduce inpatient LOS be through facilitating effective and safe care at home through an MDT approach	<p>This component reflects the makeup of the MDT virtual ward which will support admissions avoidance as well as discharge</p> <p>Further developments and improvements will be needed to strengthen current discharge pathways:</p> <ul style="list-style-type: none"> <li>• Access to Signal clinical record system by Virtual Ward team will allow timely sharing of relevant clinical information and care needs of the patient prior to transfer to Virtual Ward</li> <li>• Completion of shared care plan with patient/relatives/carer prior to discharge outlining realistic outcomes, expected progress and current health and care needs.</li> <li>• Comprehensive and timely transfer of relevant discharge information at the time of transfer to the virtual wards to ensure safety and continuity of care.</li> <li>• Single point of access to virtual wards to enable early discussion between hospital and community how best to facilitate early supported and safe discharge.</li> </ul> <p>Effective discharge liaison/coordination team to create robust links between hospitals and Virtual Wards. This role will entail ‘pulling’ appropriate patients out from the acute sites, explaining the service, assessing patients, obtaining consent, and developing care plans.</p> <p>The skills required in the virtual ward are summarised in the table Appendix B</p>	<p>Existing teams with community services will need to have, where appropriate, clear pathways in and out.</p> <p>Based on the resources set out in the finance section, the full options total recurrent ask for 4 clusters is <b>£1.207m</b></p>
<b>CHRONIC CONDITIONS MANAGEMENT</b>	To improve care offered to this patient group:	<ul style="list-style-type: none"> <li>• 60% of hospital bed days are for patients with chronic conditions or related complications</li> <li>• Two thirds of patients admitted as medical emergencies have exacerbation of their chronic condition</li> </ul>	Chronic condition team will align to the Virtual ward clinical team and existing intermediate Heart failure

	-	<ul style="list-style-type: none"><li>• Some people are highly intensive users of services with 10% of in-patients accounting for 55% of in-patients days.</li><li>- Case managing those most at risk of exacerbation</li><li>- Timely assessment and intensive support to those with exacerbations</li><li>- Reducing LOS by facilitating discharge</li><li>- Offering point of contact for care and advice</li></ul>	<p>and COPD services. This alignment will reduce referrals to the virtual wards and ensure access to secondary care expertise when needed (Heart Failure and respiratory) . Referrals will also be received directly from practices.</p> <p>Based on the resources set out in the finance section, the full options total recurrent ask for 4 clusters is <b>£328k (this is halved for the reduced option in Year 2)</b></p>
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## 4.0 BENEFITS

The benefits from this investment need to continue to be tested alongside the investments into the sister UEC business cases. Lightfoot Solutions have supported the analysis of opportunities and benefits of this model of care.

Additional in depth analysis by Lightfoot to inform benefits definition and quantification:

Cohort 1 patients:

- By identifying patients in each GP cluster who are pre-frail or frail, providing them with step-up care, rapid pull from acute care to step down at home and improved management of chronic conditions, the virtual wards will contribute to a reduced number of attendances and admissions and decrease the length of stay in hospital for this patient cohort.
- By reducing admissions and reducing LOS, there will be a reduction in used bed days in SBUHB which equates to a potential cost saving
- The investment made in establishing the virtual ward is likely to be less than the saving made by the outcomes and so it is a cost-effective intervention as well as delivering significantly improved patient outcomes.
- Reducing the number of bed days used by this patient cohort by 10% could save potentially **8,000-10,000** bed days per year.

Cohort 2 patients:

- Potentially frail patients includes patients aged over 50 who have experienced at least one LoS over 14 days OR a patient over 50 who has been admitted and experienced a Lancet frailty score of > 5 based on their inpatient diagnoses, when on review of diagnosis are deemed to have been admitted for a condition that could be managed in the community
- By initiating the virtual ward in the 4 clusters; Neath, Upper Valley, Cwm Tawe and Bay Health and actively pulling patients back to community based care before they reach day 3 in hospital, their medical and social needs will be met outside of the acute setting and those returning to a package of care will not have had this cancelled within the acute admission.
- This has the potential to reduce the LoS for 30% of the admitted frail cohort of patients.
- Taking a conservative estimate of the ALoS for this group being 10 days, this would reduce the LoS for each patient by 7 days.
- Around 90 frail patients from the 4 target clusters are admitted as emergencies each week.
- If a third are pulled using the virtual ward (30) and each patient has a reduced LoS by 7 days, this equates to saving a ward of beds in a year./ **10,900** bed days.

Admission avoidance:

- An enhanced regional ACT service will allow an increased focus on preventing avoidable admissions of care home patients.
- Currently an average of 6 calls are placed to WAST from care homes in SBUHB.

- Through regular review of the WAST stack and ACT attendance to these care home calls it would be expected that an additional three admissions per day could be avoided across SBUHB
- This would equate to a further potential saving of **7665** bed days.

It is important to note that there is a risk of potentially double counting any benefits across the UEC projects and that for less than full solution option, these benefits will reduce.

## 5.0 COSTINGS

This section should be read in line with Appendix A which includes the embedded detailed costs of the two main options.

The table below summaries the costs and financial benefits associated with implementation of the full model (option 2)

	Year 1					Year 2					Year 3					Recurring
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
<b>Executive Summary</b>	<b>£000</b>															
Revenue Costs	34	490	713	713	1,949	709	709	709	709	2,838	709	709	709	709	2,838	2,838
Less Cash Releasable Savings	0	0	233	554	787	876	1,042	1,072	1,072	4,062	1,072	1,072	1,072	1,072	4,288	4,288
Less Available Funding	26	77	77	77	257	0	0	0	0	0	0	0	0	0	0	0
<b>Net Revenue Required</b>	<b>8</b>	<b>413</b>	<b>403</b>	<b>81</b>	<b>905</b>	<b>-166</b>	<b>-333</b>	<b>-363</b>	<b>-363</b>	<b>-1,224</b>	<b>-363</b>	<b>-363</b>	<b>-363</b>	<b>-363</b>	<b>-1,450</b>	<b>-1,450</b>
Capital Costs	0	74	0	0	74	0	0	0	0	0	0	0	0	0	0	0
Less Available Funding	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Net Capital Required</b>	<b>0</b>	<b>74</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Funding Required</b>	<b>8</b>	<b>486</b>	<b>403</b>	<b>81</b>	<b>979</b>	<b>-166</b>	<b>-333</b>	<b>-363</b>	<b>-363</b>	<b>-1,224</b>	<b>-363</b>	<b>-363</b>	<b>-363</b>	<b>-363</b>	<b>-1,450</b>	<b>-1,450</b>

The assumptions underpinning the costings are:

- Note gross investment required in 21/22 is £1,212k as savings already assumed in Morriston and Singleton CIPs.
- A bed saving per day of £155 has been included which is consistent with the CIPs identified by Morriston and Singleton
- The number of beds reduced will be an average of 16 Q3, 39 Q4, 62 Q1 22/23, 74 Q2 22/23 and 76 from Q3 22/23
- The funding available relates to Transformation funding in Yr 1 only, for risk stratification. Transformation slippage opportunities are not included.
- The above costs are for the Virtual Ward for MDTs for 4 clusters, ACT, Chronic Conditions
- The cost of £250k p.a for 16 Clinical Geriatrician sessions has been excluded as that is part of a separate business case.
- The cost excludes palliative care which is part of a separate business case



The table below summaries the costs and financial benefits associated with implementation of the reduced model excluding ACT development (option 4)

	Year 1					Year 2					Year 3					Recurring?
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
<b>Executive Summary</b>	<b>£000</b>															
Revenue Costs	34	345	422	422	1,223	308	308	308	308	1,231	308	308	308	308	1,231	1,231
Less Cash Releasable Savings	0	0	174	349	523	453	504	504	504	1,965	504	504	504	504	2,015	2,015
Less Available Funding	26	77	77	77	257	0	0	0	0	0	0	0	0	0	0	0
<b>Net Revenue Required</b>	<b>8</b>	<b>268</b>	<b>171</b>	<b>-3</b>	<b>443</b>	<b>-146</b>	<b>-196</b>	<b>-196</b>	<b>-196</b>	<b>-734</b>	<b>-196</b>	<b>-196</b>	<b>-196</b>	<b>-196</b>	<b>-784</b>	<b>-784</b>
Capital Costs	0	35	0	0	35	0	0	0	0	0	0	0	0	0	0	0
Less Available Funding	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Net Capital Required</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Assumptions:**

A bed saving per day of £155 has been included which is consistent with the CIPs identified by Morriston and Singleton

The number of beds reduced will be an average of 12 Q3, 25 Q4, 32 Q1 22/23 and 36 from Q2 22/23

The funding available relates to Transformation funding in Yr 1 only for risk stratification. Risk stratification is excluded for Yr 2

The above costs are for the Virtual Ward for 4 clusters, Chronic Conditions. Assumes no ACT uplift

The costs of £250k p.a for 16 Clinical Geriatrician sessions has been excluded as that is part of a separate business case.

## 6.0 OPTIONS

The table below summarises the 2 main options:

Option 2 is an option that is intended to fully realise the benefits as identified through the lightfoot analysis and reflects the opportunity and ask in the table in section 3.

Option 3 adjusts the investment to be line with the investment earmarked in the Annual plan 21/22. The benefits have been adjusted accordingly

OPTIONS	DESCRIPTOR	COSTS	BENEFITS
<b>OPTION 1</b> <b>Do nothing</b>	Baseline comparator	No additional costs	No additional benefits
<b>OPTION 2</b> <b>Fully realise benefits identified for 4 clusters</b>	<ul style="list-style-type: none"> <li>Based on full model described in this business case</li> </ul>	20/21 part year effect <b>£1.7m</b>  20/21 full year effect <b>£2.8m</b>  Capital Req <b>£74k</b>	Bed day reduction of circa <b>28k</b> (in line with Lightfoot analysis of cohorts 1 and 2 and ACT diversions of care home demand from WAST stack)
<b>OPTION 3</b> <b>Reduced model of virtual ward and ACT but still in 4 clusters</b>	<ul style="list-style-type: none"> <li>No investment in ACT – current resources remodelled only</li> <li>50% reduction in Chronic Conditions component</li> <li>Reduction in VW establishments (eg reduction in GP clinical sessions from 3 per cluster to 2 per cluster and reduction in project management)</li> <li>No funding for risk stratification in year 2</li> </ul>	20/21 part year effect <b>£1m</b> 20/21 full year effect <b>£1.23m</b>  Capital Req <b>£35k</b>	Benefits would reduce to around <b>13k bed days</b>  The 7665 WAST stack diversions plus a proportion of the cohorts 1 and 2 would not be realisable without implementation of full model

## 7.0 PROJECT ARRANGEMENTS

The virtual ward business case will be reported into the Step Up/Step Down Project and into the UEC Programme (and onto to Management Board).

Key project roles are set out below:

Role	Name	Designation
Managerial Lead	TBC	
Senior Project Director	Brian Owens	Group Service Director
Project Clinical Lead	Anjula Mehta	Group Medical Director
Project Planner	Heledd Bingham	Strategic Planning Manager
Project Manager	Out to advert	
Project Support Officer	Out to advert	
Finance Lead	Sally Killian	
Workforce Lead	TBC	
Digital Lead	TBC	
Transformation Lead	Rich Brown	Head of Transformation Portfolio

There are significant interdependencies that need to be taken into account. As a summary these are outlined below:

- Delivery timescales are dependent upon the agreed sequencing of the wider UEC and Health Board plans;
- Consultant Geriatricians posts are critical to the successful implementation of the Virtual Ward Model;
- The virtual ward model is a key enabler for the Specialist Palliative Care model and investment already agreed (although it is not expected that these benefits do overlap)
- Delivery is dependent on capacity within Social Care services to support the facilitation of earlier discharge and to provide support to patients who are being managed via the Virtual Ward, where deemed necessary;
- “Hospital 2 Home” programme through the RPB, specially the links with pathways out of hospitals
- Workforce: Likely to be workforce constraints and completing workforce opportunities between programmes and projects within the UEC programme;
- Availability of Clinical lead time, Operational Management and supporting functions (e.g Data, Workforce, Finance) .
- There is a risk of double-counting any savings/benefits amongst other UEC projects which needs to be recognised as part of the overall roll out of the programme.

### Risks (needs some further review)

Risk Number	Description of Risk	Severity (RAG)	Mitigating Actions
VW1	Availability of funding for the recruitment of Cluster Geriatrician	12	<ul style="list-style-type: none"> <li>Geriatrician gap analysis has been undertaken by Dr Rhodri Edwards;</li> <li>Business Case has been developed;</li> <li>Scope to utilise community sessions within current work plans in the short terms whilst recruitment to wider Geriatrician.</li> </ul>
VW2	Timescales for recruitment and the availability of the required workforce	20	<ul style="list-style-type: none"> <li>Discussions ongoing with HR and service leads;</li> <li>Availability to be scoped further;</li> <li>Review of short term resources within cluster groups to be reviewed;</li> <li>JDs to be agreed and advertised during April 2021;</li> </ul>
VW3	Third COVID 19 wave	12	<ul style="list-style-type: none"> <li>Discussions commenced with GP and cluster leads;</li> <li>3 clusters are signed up to the development of the enhanced VW;</li> <li>Monetary offering for the Risk Stratification element will off-set administrative costs of process;</li> <li>Data able to be shared with GPs which evidences a reduction in calls and appointments from patients in localities where there is an established Virtual Ward.</li> </ul>
VW4	Capacity within social care to undertake social care assessments and deliver any requirements for Domiciliary care / Reablement.	15	<ul style="list-style-type: none"> <li>Social Worker posts have been costed as part of the model;</li> <li>O.T posts costed as part of the model;</li> <li>Discussion and engagement on-going with social care;</li> <li>Linked to D2RA, additional monies for pathway 2 has been made available by Welsh Government, will lead to an increase in capacity within CRT/ Social care services.</li> </ul>
VW5	Current workforce alignment. Demand and capacity audit to align current staff to proposed service outcomes for virtual ward, ACT and Chronic Conditions management.		<ul style="list-style-type: none"> <li>Completion of demand and capacity audit for all core services involved in augmenting the virtual ward concept.</li> <li>Identification of 'cross-over' to achieve maximum efficiencies.</li> <li>Staff engagement to evaluate opportunities in dual service roles.</li> </ul>
VW6	Current workforce upskilling. Targeted training needs analysis for each service to determine the gaps in skills and experience to		<ul style="list-style-type: none"> <li>Continuous skills assessment of core services to ensure upskilling in line with planned outcomes</li> <li>Ringfencing of specialist courses/modules to ensure staff associated with VW outcomes are prioritised for training, e.g. Non-medical prescribing,</li> </ul>

	support the proposed model of care for Virtual Ward, ACT, DN and Chronic Conditions Management		clinical decision making, advanced practice, chronic conditions management. <ul style="list-style-type: none"> <li>• Priority for clinical mentorship and supervision to ensure quick and effective upskilling of workforce.</li> </ul>
	There is a risk of double		<ul style="list-style-type: none"> <li>•</li> </ul>
			<ul style="list-style-type: none"> <li>•</li> </ul>

## 8.0 CONCLUSIONS

This business case seeks approval of option 2 or 3 recognising the associated benefits.

Support in principle is required to mitigate the risk associated with lag on recruitment and then inability to delivery benefits and CIP in line with plan

Further wok on aligning and testing the benefits between component cases is ongoing.

## APPENDX A – Financial Detail

See attachment



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## APPENDIX B

### Summary of workforce roles in virtual ward and Chronic Conditions teams

<u>Role Justification for Virtual Ward Model:</u>	<u>Role Justification - Chronic Conditions Management Team</u>
<ul style="list-style-type: none"><li>• <b>Cluster Geriatrician.</b> VW support and associated administration, targeted advice and support to Community teams and GP practices, falls clinics, hot clinics, home assessment.</li><li>• <b>Virtual Ward GP.</b> VW lead, chair all VW meetings, associated administration, practice liaison, support to VW and community teams as appropriate/indicated.</li><li>• <b>Virtual Ward Clinical Manager.</b> Daily management and co-ordination of the VW caseload, liaison with community, third sector and secondary care teams to ensure care plans are completed and activated, liaison with DLNs and secondary care to identify appropriate VW patients, line management of administrator.</li><li>• <b>Virtual Ward Project Manager.</b> Shared resource between two VWs. Set up of VW with regards to processes and pathways, digital implementation, performance and evaluation data capture, link to PCTG for feedback and assurance.</li><li>• <b>Virtual Ward Clinical Pharmacist.</b> Shared resource between two VWs. Medicines management and poly pharmacy advice to the VW and Chronic Conditions Management team, focus on Care Home patients and optimisation of prescribing, clinical audit and outcomes.</li><li>• <b>Virtual Ward Occupational Therapist.</b> Rapid assessment of VW patients, liaison with Community, secondary and third sector services to optimise patient care and safety</li></ul>	<ul style="list-style-type: none"><li>• <b>Band 7 Clinical Nurse Specialist.</b> Caseload management of referred Chronic Conditions patients, optimisation of chronic conditions management for frequent attender/high risk patients, home visits and hot clinics, patient care plans promotion of self care, liaison with VW, intermediate care and secondary care services as appropriate, line management of band 4 staff.</li><li>• <b>Band 4 Assistant Practitioner/HCSW.</b> Support band 7 workload in case management, care plan discussions, follow up and monitoring, targeted clinical interventions in accordance with level 4 scope of practice.</li></ul>

<p>in the home, support cluster Geriatrician-led falls clinics, holistic assessment to identify wider patient needs and appropriate referral.</p> <ul style="list-style-type: none"> <li>• <b>Virtual Ward Social Worker.</b> Shared resource between two VWs. Rapid social care assessment for crisis patients with complex social needs, liaison with local authority to expedite care packages/equipment, liaison with the wider VW team to identify early intervention needs, home visits and family/carers liaison.</li> <li>• <b>Virtual Ward Administrator.</b> General workforce administration, VW meeting preparation, caseload/new referral co-ordination and listings, point of contact for services and VW patients/carers, meeting minutes.</li> </ul>	
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