# **TECHNOLOGY ENABLED CARE**



# **Chapter 2: Retrospective Data**

# Phase 1 Survey – Professional Perspective

NHS Wales Video Consultation Service Evaluation December 2020



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# Owners, Authors & Reviewers of the Data

## **Owners:**

This data is the ownership of Technology Enabled Care (TEC) Cymru and their funders the Welsh Government. The data was designed, collected, analysed & written up by the TEC Cymru in-house Research & Evaluation Team

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### Referencing the Data:

When using the data as a source please reference the authors and owners of the data appropriately.

For example:

e.g., Johns et al (Dec, 2020) Phase 1 Report. Chapter 2 Retrospective Survey from Professionals. The NHS Wales Video Consulting Service, TEC Cymru. Cited at (add the website or other source and date retrieved)

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# Retrospective Professional Perspective of Video Consulting: Quantitative & Qualitative Data

# Overview & Key Points of Chapter

The purpose of this survey was to capture 'retrospective data' to understand 'how it went' during Phase 1 of using VC in Wales. Unlike the data in Chapter 1 (Live data), this survey was sent to professionals in Wales, regardless of the type of platform used.

This chapter provides the analysed data collected from the quantifiable (quantitative) and narrative (qualitative) aspects of the 'retrospective' survey sent out to all professionals in Wales as an End of Phase 1 (March-August) Evaluation of Video Consulting (VC).

This chapter is split into different sections, to include:

- An 'All Wales' analysis and write up of the Quantitative findings.
- Individual Health Board (HB) analysis and write up of the Quantitative findings
- An 'All Wales' analysis and write up of the Qualitative findings (with HB and care sector specific quotes).
- Discussion of Chapter
- Conclusions, Limitations and Recommendations.

# Aims & Methodology

The evaluation framework for the NHS Wales Video Consulting Service is a robust and mixed methods approach. Therefore, to ensure that all types of perspectives are captured, the surveys are distributed as 'live' (as demonstrated in Chapter 1) and as 'retrospective' (the current chapter) datasets.

The 'retrospective' survey data that is analysed and reported within this chapter was a 10-question survey capturing both quantifiable and narrative measures. The survey was designed to capture an End of Phase 1 (March-August 2020) retrospective understanding of the professional perspective of



Video Consulting (VC) in Wales. Unlike the 'live' survey data (analysed in Chapter 1) which captures the use of the Attend Anywhere platform only, this survey sought to explore the use of 'any' communication platform used for the delivery of health and social care. A Survey Monkey link (of the current survey) was sent out to all known health & social care professionals in NHS Wales and was also advertised on social media sites. The survey was limited to professionals within Wales only, and it ran for one month between August and September 2020.

### Sample Size

In the one month of live activation, the survey collected data from a total of 1256 respondents. The total sample included respondents from all 7 Health Boards in Wales, however no responses were received from Trusts.

# Survey Questions

The survey questions were aimed at understanding the current situation of VC in Wales across Health & Social Care. The questions included:

- 1. The types of platforms used for VC
- 2. Preference for use of VC
- 3. Benefits matrix rating scale (13 proposed benefits)
- 4. Challenges matrix rating scale (8 proposed challenges)
- 5. Health Board or Trust
- 6. Profession and Speciality
- 7. True & False Statements (16 statements relating to VC use)
- 8. 1-100 Rating Scale (Ad hoc to widespread use of VC)
- 9. Demographics (age and gender)
- 10. Case stories

Additional narrative boxes were provided alongside many of the questions to allow for further explanation. These narrative boxes were analysed and reported in the 'qualitative' section of this report.



# Quantitative Data from the 'Retrospective' Survey

There was a total of 1256 responses in the retrospective professional survey. The total sample included n = 297 males and n = 900 females, n = 3 non-binary, and n = 26 preferred not to say. Of the respondents, n = 14 were between the ages of 18 and 24, n = 526 were 25-44, n = 659 were 45-64, and n = 8 were 65-80+.

### Survey Questions

The survey questions were aimed at understanding the current situation of VC in Wales in Health & Social Care. The questions are shown in order within this section.

# Do you think VC should be used?

All survey respondents were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The majority (79%) of professionals responded 'yes' that they think it should be used for these types of appointments, whereas 20% responded 'maybe' and 1% responded 'no'. The distributions of responses are displayed in Figure 1.







# Use of VC within Department/Service.

Additionally, professionals were also asked to rate (with a numerical figure), where they perceived their department or service to be regarding the use of VC at this current time, ranging from 0 (ad hoc) to 100 (widespread routine practice). There were a total of 1217 responses for this question. The mean response was 49.95 (standard deviation (SD) = 31.28), which suggests that respondents, on average, rate their usage approximately half-way between ad hoc and widespread. Nevertheless, based on the high standard deviation, there is a widespread variation across care sectors.

### Platform Usage in Wales

Respondents were asked the following question, "Do you use any of the following communication platforms for health and social care video consultations with your patients?"

There were eight options to choose from (displayed in table 1 below) or they could respond "other", stating the platform in an open-ended question box. The number of respondents using each platform type is also displayed in Table 1. 'Attend Anywhere' (1000 respondents) was the most common response, followed by Microsoft Teams (306 respondents).

Platform	Frequency
FaceTime	63
WhatsApp	98
Facebook Messenger	9
Zoom	78
Skype	103
Microsoft Teams	306
Google Hangouts (and other google platforms)	5
Attend Anywhere	1000
"Other"	
AccuRx	89
Ask My GP	2
CISCO	3
Clinic.co	1
Doxy.me	1
Duo	1
Hospify	1
Webex	13
Telephone Only	35

#### Table 1. The number of respondents that are using each platform type.



## Benefits of VC in Wales

There were thirteen questions included in this survey that asked respondents to rate how 'beneficial' they believed possible advantages of VC were for themselves and for their patients, on a 5-point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 2 and Table 3 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible advantages. These are also discussed individually below. In general, VC was perceived to be highly beneficial across the majority of proposed benefits, except perhaps lowering levels of stress/anxiety (for patients), where responses were less beneficial from the perspective of professionals.

	Saves time, space, and preparation.	Saves travel and parking	Saves travel and parking (patient)	Environmental benefits	Saves taking time off work	Saves money (e.g., travel, childcare)
Not at all Beneficial	6.8	8.7	0.7	2.5	5.2	4.5
Not Beneficial	13.2	8.8	1.1	6.0	7.8	4.3
Quite Beneficial	19.7	13.3	7.8	16.7	16.8	16.3
Beneficial	27.1	20.0	24.4	28.3	28.4	29.6
Very beneficial	33.1	49.1	65.9	46.5	41.8	45.2
Freq.	1212	1134	1221	1209	1161	1181

Table 2. The distributions (%) of responses to how VC would benefit themselves and patients from the professionals' perspectives.

# Table 3. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	5.0	1.6	10.3	9.8	7.7	1.5	10.1
Not Beneficial	6.9	3.9	16.0	15.8	16.3	2.8	15.6
Quite Beneficial	24.6	19.7	22.5	27.6	31.0	11.4	33.7
Beneficial	28.3	32.5	23.3	24.8	23.7	28.3	22.2
'very beneficial'	35.2	42.2	27.9	22.0	21.3	56.0	18.4
Freq.	1213	1224	1164	1193	1150	1202	1195



**Saves time, space, and preparation.** 60.2% of respondents believed VC to be 'very beneficial' or 'beneficial' in terms of saving time, space, and preparation for appointments.

**Saves travel and parking (professional and patient).** In terms of whether the professional believed VC was beneficial for saving time taken by travelling and parking for appointments, they perceived VC to be more beneficial for patients (90.3% 'very beneficial' or 'beneficial') than for themselves (69.1% 'very beneficial').

Overall, saving patient travel and parking times was rated as the most beneficial by respondents, with 98.1% of these stating VC is 'quite beneficial', 'beneficial', or 'very beneficial' for this aspect of the patients' appointment.

**Environmental benefits.** In general, professionals believed VC to be beneficial for the environment, with almost 74.8% of respondents stating that it was 'very beneficial' or 'beneficial'.

**Saves taking time off work & saves money.** VC was also perceived to be 'very beneficial' or 'beneficial', with 70.2% of responses for saving time that can be used for time off or for other commitments. In addition, professionals also similarly rated VC positively (74.8% of responses) for saving money, perhaps that would have been spent on travel or children care.

**Improves access to care & Improves convenience.** Once again, access to care for patients was seen to be a benefit of VC, with 63.4% of respondents stating that VC was 'very beneficial' or 'beneficial'.

Also, VC was seen to improve convenience from the professionals' perspectives, suggesting that VC is more convenient for themselves and patients, with 74.7% of responses as 'very beneficial' or beneficial'.

**Reduces wait times.** Reduction of waiting times was one of advantages that had the least positive responses, with 51.2% rating this as 'very beneficial' or 'beneficial'.

**Reduces likelihood of DNAs**. As with wait times, this aspect was rated less beneficial, with 46.8% reporting this to be 'very beneficial' or 'beneficial', however, this still suggests that VC aids in reducing the rates of DNAs.



**Improves family involvement and support.** Once again, this question received mixed opinions, with 45% of professionals view VC as being 'very beneficial' or 'beneficial' for increasing family involvement for patients.

**Lowers rates of infection.** Lowering rates of infection was perceived as 'very beneficial' or 'beneficial' by 84.3% of responses highlighting VC as a benefit in lowering these rates during the COVID-19 pandemic.

**Lowers stress and anxiety (of patients).** This was the least positive benefit of VC. Specifically, 25.7% of responses reported VC 'not beneficial' or 'not at all beneficial' in reducing stress and anxiety. However, 40% still rate it as 'very beneficial' or 'beneficial'.

# Challenges of VC in Wales

Eight different challenges were proposed to professionals that could potentially make VC difficult for themselves (Table 4) and for patients (Table 5). They were asked to rate the relevancy of the challenges on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

Overall, the comparison between the findings in Table 4 and 5 suggest that professionals perceive patients to face more challenges with VC than themselves. This is revealed by the challenges being more relevant for the patients, according to the respondents, than the professionals. In particular, large discrepancies lie in challenges introduced by having access to a device (Figure 2), internet access and connection (Figure 3 and 4) and having a lack of confidence (Figure 5).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	34.9	43.2	18.5	26.7	30.1	25.6	50.4
A little relevant	11.7	11.1	16.1	15.0	21.6	23.5	22.3
Relevant	18.1	13.6	19.7	24.4	24.7	25.4	16.6
Very Relevant	35.2	32.1	45.7	34.0	23.7	25.5	10.7
Freq.	1203	1177	1220	1203	1168	1114	1149

Table 4. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals.

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	1.3	1.5	0.3	8.3	8.9	8.4	2.2
A little relevant	10.7	13.9	10.4	22.8	25.8	26.5	16.5
Relevant	27.4	28.1	26.0	27.7	32.8	31.1	31.3
Very Relevant	60.6	56.4	63.3	41.3	32.5	34.0	50.0
Freq.	1235	1233	1233	1221	1200	1194	1227

# Table 5. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

**Preference for Face-to-Face (FTF) or Telephone Call (TC).** In addition to the challenges in the tables above, professionals were also asked if a preference for face-to-face (FTF) would introduce difficulties with VC for themselves and their patients. The analysis of this challenge revealed that professionals viewed this to be more relevant for patients, suggesting that a preference for FTF would introduce more difficulties for patients than for professionals (Figure 6).











Figure 4. The distribution of relevancy ratings for difficulties introduced by poor internet connectivity for professionals/clinicians and patients.







Figure 6. The distribution of relevancy ratings for difficulties introduced by having a preference for FTF or telephone.



# Statements of VC Use by Professionals across Wales

Sixteen different statements regarding VC were given to respondents, whereby they were asked to state whether they were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 6 and Table 7.



	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinical colleagues keen to use VC	Management Colleagues keen to use VC	Admin Colleagues keen to use VC	VC is equivalent to TC	VC is equivalent to FTF
True	75.4	42.4	46.8	69.0	75.9	40.1	43.6	22.3
False	18.7	43.4	32.1	11.5	6.1	18.6	38.4	61.5
Unable to say	5.9	14.1	21.1	19.5	17.9	41.3	18.0	16.2
Freq.	1238	1195	1208	1242	1205	1156	1225	1234

#### Table 6. The distributions of responses to each of the statements regarding VC.

Table 7. The distributions of responses to each of the statements regarding VC.

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security have been resolved
True	45.8	69.9	48.8	56.4	50.5	60.1	51.8	47.0
False	27.9	19.4	33.2	35.0	38.8	17.8	26.5	14.3
Unable to say	26.2	10.7	18.0	8.6	10.7	22.1	21.7	38.7
Freq.	1228	1225	1234	1235	1228	1186	1172	1179

**Regularly use VC.** 75.4% of professionals stated that they regularly use VC, which is a huge positive, as they are making regular use of this tool for their consultations with patients.

**Appointment offered as a choice to the patient.** The responses to this statement varied and was almost equally distributed between those who stated 'true' (42.4%) and those who stated 'false' (43.4%). This suggests that, in these circumstances, there seems to be an equal number of professionals that offer VC as a choice to the patients, as there are who do not, however it cannot be generalised.

A dedicated team or individual implementing VC. Almost half (46.8%) of the respondents stated that they have a dedicated team or individual that is in charge of the implementation of VC.

**Colleagues are keen to use VC.** According to the professionals, their Management colleagues were the keenest to use VC, with 75.9% of respondents stating that this statement was 'true'. Clinical colleagues were the second keenest (69.0% 'true' responses). However, only 40.1% reported



Administration colleagues being keen to use VC, and 41.3% were unable to say. This could suggest that Administration teams are not clear on the usage and implementation of VC, or that the professionals who were responding to this survey are unaware of what their Administrative teams do within their service and how they feel about VC. This may be because, for some, VC can cause extra work for the admin teams, who then don't see it as a benefit.

VC is the equivalent to FTF or TC. VC was seen to be equivalent to telephone calls (TC) by 43.6% of respondents. However, VC was only equivalent to FTF according to 22.3%, with 61.5% of professionals believing VC and FTF to be different from one another. Whether this difference is positive or negative, however, is unknown.

Adequate support, training, internet, equipment, and space/rooms. Responses to whether professionals had adequate access to these aspects that are essential for VC were similar across Wales. The statements were 'true' for the most professionals for access to training (69.9%), followed by equipment (56.4%), space/rooms (50.5%), internet connectivity (48.8%), and finally technical support (45.8%).

Interestingly, many of respondents were 'unable to say' if these statements were 'true or false', such as 26.2% of respondents were uncertain about adequate support and 18% were uncertain about sufficient internet connectivity.

**Able to log VC in booking systems.** 60.1% of professionals report being able to log VC appointments in their booking systems. Interestingly, 22.1% were unable to say, again suggesting they were uncertain about this statement.

**Bookings are set up for VC.** Over half (51.8%) stated that their booking systems and teams are set up for VC. Interestingly, 21.7% were unable to say, again suggesting they were uncertain about this statement.

**Concerns about cyber security.** Considering cyber security and privacy, 47% of respondents stated that all concerns had been resolved, potentially suggesting they received technical support in this area, but this may also be a concern, that they believe all these issues are all resolved. However, 38.7% were 'unable to say', which also suggests that some professionals may not have encountered these problems, or again are uncertain about this statement.



# Care Sector Split: All-Wales Findings

This section will consider the findings from Primary, Secondary, and Community care, as well as responses from Management and Administration. There were n = 211 responses for Primary, n = 873 for Secondary, n = 6 for Community, and n = 36 for Management and Administration, and n = 167 respondents put 'other' but did not report their specialty or profession, or they did not respond at all.

**Respondent demographics.** The demographics of professionals are displayed in Table 8.

	Primary	Primary		Secondary		Community		ement/Admin
Gender	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Male	83	39.3	173	20.2	4	66.7	2	5.7
Female	122	57.8	666	77.8	2	33.3	32	91.4
Non-Binary	0	0.0	3	0.4	0	0.0	0	0.0
PNTS	6	2.8	14	1.6	0	0.0	1	2.9
Freq.	211		856		6		35	
Age								
18-24	1	0.5	11	1.3	0	0.0	9	0.0
25-44	67	32.4	393	46.5	3	50.0	21	29.0
45-64	138	66.7	437	51.7	3	50.0	1	67.7
65-80	1	0.5	4	0.5	0	0.0	0	0.0
Over 80	0	0	1	0.1	0	0.0	1	3.2
Freq.	207		846	•	6		31	•

Table 8. The demographics of the professionals in each care sector.

# Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The responses to this question for each care sector, as well as Management and Administration are displayed in Figure 7. Overall, Primary and Secondary care were similar in their responses to this question, with 77.7% of respondents stating 'yes' in Primary care and 79.9% in Secondary care. Community care was slightly lower (66.7%) but this may be due to the low group size (n = 6).

Interestingly, the responses for 'no' were very low across all groups, once again except for Community care. This is a positive response, as the majority stated either 'yes' or 'maybe', suggesting that all care sectors, including Management and Administration are keen to use, and perceive value in VC.





#### Figure 7. The distributions of responses to should VC be used in each care sector.

### Benefits - by Care Sector

The responses to the thirteen possible benefits of VC are displayed in Tables 9-12 for both Primary and Secondary care, to see the differences (if any) between the two care sectors. Community care, Management and Administration will be discussed individually below, as they both had relatively smaller group sizes compared with Primary and Secondary care.

Table 9. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

		e, space, and aration.	Saves trave	el and parking	Saves travel and parking (patient)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	11.3	6.0	10.4	8.4	1.0	0.6
Not Beneficial	16.7	12.6	16.1	6.5	2.0	1.2
Quite Beneficial	22.5	18.7	19.3	12.1	17.2	5.2
Beneficial	23.0	27.3	20.3	19.1	30.5	22.1
Very beneficial	26.5	35.4	33.9	53.9	49.3	70.9
Freq.	204	301	192	796	203	859



# Table 10. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Environm	Environmental benefits		Saves taking time off work		ey (e.g., travel, dcare)
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	4.0	1.9	4.5	4.8	4.0	3.9
Not Beneficial	8.9	5.5	6.5	8.0	7.5	3.9
Quite Beneficial	17.8	16.3	24.6	15.1	26.0	14.7
Beneficial	33.2	26.2	30.7	27.8	31.5	27.9
Very beneficial	36.1	50.1	33.7	44.3	31.5	49.7
Freq.	202	852	199	810	200	829

# Table 11. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	-	Improves access to care		Improves convenience		Reduces wait times	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not at all Beneficial	6.5	4.3	1.4	1.2	11.7	9.8	
Not Beneficial	9.5	6.9	6.3	4.0	22.3	15.3	
Quite Beneficial	27.4	23.8	25.1	18.6	19.8	23.1	
Beneficial	24.9	27.9	30.9	32.0	18.8	23.6	
Very beneficial	31.8	37.1	36.2	44.3	27.4	28.2	
Freq.	201	854	207	857	197	817	

# Table 12. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Reduces likelihood of DNAs				Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	8.2	10.1	8.2	7.3	3.9	1.2	13.5	9.4
Not Beneficial	20.0	15.3	22.6	15.2	6.9	1.9	20.5	14.5
Quite Beneficial	24.1	27.6	36.4	29.7	16.3	10.3	32.0	33.9
Beneficial	22.6	26.2	16.9	24.6	33.5	26.5	20.0	22.7
Very beneficial	25.1	20.8	15.9	23.1	39.4	60.1	14.0	19.5
Freq.	195	842	195	808	203	843	200	836



**Considering Primary and Secondary**. In general, Secondary care were more positive in their responses than Primary care, with a higher frequency of 'very beneficial' responses for every potential advantage, except for reducing the likelihood of DNAs (in that Primary care rated this higher for 'very beneficial'). However, although a lower frequency for this, the two care sectors were still similar in the distributions of the responses.

Also, Primary and Secondary care were similar in the responses they gave for the reduction of wait times, although Secondary care was slightly more positive, once again. The benefit with the biggest difference between Primary and Secondary care was that of lowering rates of infection, in that only 39.4% of Primary care respondents rated this as a 'very beneficial' aspect of VC, compared with 60.1% of Secondary care professionals. This suggests that Primary care do not see VC as being as beneficial for lowering the rates of infection, and the reason for this may be that VC does not prevent FTF in as many cases as Secondary care does. It may also suggest that infection prevention is not as high on the agenda in Primary care, in that they don't have any sick in-patients, as an example. In this context, Primary and Secondary care are different work environments, and therefore cannot be directly compared.

**Community care.** There were only six professionals in Community care, thus these responses will be considered in Table 13 and Table 14.

	Saves time, space, and preparation.	Saves travel and parking	Saves travel and parking (patient)	Environmental benefits	Saves taking time off work.	Saves money (e.g., travel, childcare)
Not at all Beneficial	0.0	0.0	0.0	0.0	0.0	16.7
Not Beneficial	16.7	0.0	0.0	0.0	0.0	0.0
Quite Beneficial	33.3	16.7	16.7	0.0	20.0	16.7
Beneficial	16.7	50.0	33.3	33.3	40.0	16.7
Very beneficial	33.3	33.3	50.0	66.7	40.0	50.0
Freq.	6	6	6	6	5	6

Table 13. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives in Community care.



	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	16.7	0.0	16.7	0.0	20.0	0.0	16.7
Not Beneficial	0.0	0.0	0.0	33.3	20.0	0.0	33.3
Quite Beneficial	33.3	50.0	50.0	33.3	60.0	0.0	33.3
Beneficial	50.0	16.7	0.0	16.7	0.0	20.0	16.7
Very beneficial	0.0	33.3	33.3	16.7	0.0	80.0	0.0
Freq.	6	6	6	6	6	5	6

# Table 14. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives in Community care.

The most positive responses for the benefits of VC in Community care was the environmental benefits, where the majority of respondents stated VC was 'very beneficial'. The least beneficial response, on the other hand, was for improving family support and involvement, with no responses for 'beneficial' or 'very beneficial'. However, due the low respondent numbers, all responses may have been skewed to have appeared more positive or negative than what they would be if there was a larger number of responses.

**Management and Administration.** The distributions of responses from Management and Administration are displayed in Figure 8 and Figure 9. The number of responses per question ranged from 26 to 36.











Overall, the responses were fairly positive. For these teams, saving time taken for travelling and parking for patients was seen to be the most beneficial aspect of VC, with 82.9% of respondents stating that this was 'very beneficial'. In addition to this, 77.1% reported VC being 'very beneficial' for lowering the



rates of infection. The least positive responses were for the improvement of family involvement and support, with only 29% of respondents stating VC was 'very beneficial' for this aspect.

### Challenges – by Care Sector

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These were considered for Primary and Secondary care, to see the differences (if any) between the two care sectors. Community care, Management and Administration are discussed individually below, as they both had relatively smaller group sizes compared with Primary and Secondary care.

**Primary and Secondary.** Tables 15-18 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (15 and 16) and patients (17 and 18), in Primary and Secondary care.

	Access to a device		cess to a device No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	40.1	33.5	43.3	43.1	23.5	17.5	42.0	22.7
A little relevant	9.4	12.6	9.7	11.9	13.7	16.6	11.0	15.6
Relevant	17.8	18.4	11.7	14.2	14.7	20.9	20.5	25.8
Very Relevant	32.7	35.5	35.2	30.8	48.0	45.0	26.5	35.9
Freq.	202	848	196	829	204	856	200	846

Table 15. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

Table 16. The distribution of relevancy ratings and how difficult the following challenges would	b
make VC for professionals in Primary and Secondary care.	

	No serv	ice support	Not appropr	riate or suitable Lack of confidence		Lack of confidence	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	35.1	28.8	24.5	25.8	50.3	50.7	
A little relevant	18.6	22.5	19.1	25.1	22.8	22.5	
Relevant	22.2	25.7	29.3	24.1	18.1	15.9	
Very Relevant	24.2	23.1	27.1	25.0	8.8	10.8	
Freq.	194	824	188	784	193	812	

Table 17. The distribution of rel	evancy ratings and h	ow difficult the follow	ing challenges would
make VC for patients (from th	e professionals' persp	ective) in Primary and	d Secondary care.

	Access to a		No /	No / Cost of		internet	Safe Space		
	d	evice	in	internet connection		internet connectio			
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	1.0	1.2	0.0	1.7	0.0	0.3	5.7	8.7	
A little relevant	4.3	12.3	9.1	14.6	5.3	11.2	23.0	22.1	
Relevant	22.5	28.4	27.3	29.0	26.9	25.9	30.1	28.4	
Very Relevant	72.2	58.1	63.6	54.7	67.8	62.6	41.1	40.7	
Freq.	209	896	209	867	208	868	209	858	

Table 18. The distribution of relevancy ratings and how difficult the following challenges would	d
make VC for patients (from the professionals' perspective) in Primary and Secondary care.	

	Adeque	ate support	Not appropri	ate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	6.3	10.1	5.4	9.3	2.4	2.1	
A little relevant	23.4	26.9	27.8	26.8	11.6	17.7	
Relevant	36.6	31.2	29.8	30.2	30.9	32.5	
Very Relevant	33.7	31.8	37.1	33.7	55.1	47.7	
Freq.	205	843	205	840	207	865	

In general, the findings in Tables 15-18 suggest that Primary and Secondary care are similar in the ratings of relevance they gave to the potential challenges encountered when using VC, for professionals and patients. However, one challenge that demonstrated a large difference between the two care sectors was patients' access to a device introducing challenges with VC, such that 72.2% of Primary professionals rated this as very relevant, and only 58.1% of Secondary care professionals rated this the same. For the two care sectors, it also emerged that these challenges were more relevant from the patients' perspective, with higher relevancy ratings given for the patients' difficulties than their own. The largest differences between these, in both Secondary and Primary care, were for access to a device, access to internet, and lacking the confidence to use VC.

**Preference of FTF or TC.** In addition to the challenges above, professionals were also asked if a preference for FTF would introduce difficulties with VC for themselves and their patients. Analysis of these responses for Primary and



Secondary care revealed that both care sectors rate the relevancy of this challenge similarly for themselves and their patients, but large differences exist between their own and patients' perceptions. This suggests that professionals view a preference of FTF to cause more challenges for patients than for themselves (Figure 10 and 11).

Figure 10. The distribution of relevancy ratings for the preference of FTF or telephone introducing difficulties for VC, for patients and professionals, in Primary care.



Figure 11. The distribution of relevancy ratings for the preference of FTF or telephone introducing difficulties for VC, for patients and professionals, in Secondary care.



**Community Care.** Once again, as there were only 6 respondents in Community care, these will be considered separately, as it is difficult to draw comparisons



between Community care and Primary care and Secondary care due to the large differences in group sizes. The responses for relevancy ratings of the potential challenges introduced by VC for professionals and patients in Community care are displayed in Table 19 and Table 20.

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	33.3	66.7	33.3	33.3	66.7	50.0	80.0
A little relevant	33.3	16.7	33.3	16.7	0.0	16.7	0.0
Relevant	0.0	0.0	16.7	33.3	16.7	16.7	20.0
Very Relevant	33.3	16.7	16.7	16.7	16.7	16.7	0.0
Freq.	6	6	6	6	6	6	5.0

Table 19. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals.

Table 20. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	33.3	33.3	0.0	16.7	16.7	16.7	16.7
A little relevant	0.0	0.0	33.3	33.3	33.3	16.7	33.3
Relevant	16.7	50.0	50.0	16.7	33.3	50.0	16.7
Very Relevant	50.0	16.7	16.7	33.3	16.7	16.7	33.3
Freq.	6	6	6	6	6	6	6

For Community care professionals, all challenges were not very relevant from the professionals' perspective, with perhaps having access to a device being the most relevant challenges. The least relevant was having a lack of confidence. In terms of causing difficulties for their patients, access to device was also the most relevant.

**Preference for FTF or TC.** Professionals in Community care found their own preference for FTF or telephone (TC) as not 'very relevant' for introducing challenges with VC, as 16.7% stated 'not relevant', 50% for a 'little relevant', and 33.3% for 'relevant'. This compares with the relevancy for patients, where 83.3% of professionals stated this to be 'relevant', and 16.7% for 'very relevant'.



However, once again, it is important to note that due to the small number of respondents, these results may be skewed.

**Management and Administration.** Overall, Management and Administration rated patient difficulties more relevant than professionals. A large difference between the professionals and the perceptions of patients' views was seen in having poor internet connectivity, with this introducing more difficulties for patients than professionals, from the respondents' perspectives. On the other hand, the relevancy of having adequate support and the suitability of VC were similar between the patients' and professionals' views. The responses are displayed below, in Figure 13 and Figure 14.

Figure 13 (top) and Figure 14 (bottom). The distributions of relevancy ratings for difficulties with VC for the professional (top) and patient (bottom), for Management and Administration respondents.







# Statements – by Care Sector

Sixteen different statements regarding VC were given to respondents, whereby they had to state whether they were 'true', 'false', or if they were 'unable to say'. These will be considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Community care and Management and Administration are discussed individually below, as they both had relatively smaller group sizes compared with Primary and Secondary.

**Primary and Secondary care.** The distributions of responses to the statements for Primary and Secondary care are displayed in Tables 21-24.

	Regularly use VC		Appointment offered as a choice to patient		Dedicated team implementing VC		Colleagues keen to use VC (Clinical)	
	Primary Secondary		Primary	Secondary	Primary	Secondary	Primary	Secondary
True	59.2	79.7	23.3	47.3	26.5	52.0	59.8	72.1
False	34.6	13.8	67.8	37.1	65.5	21.9	20.6	8.4
Unable to say	6.2	6.5	8.9	15.5	8.5	26.1	19.6	19.5
Freq.	211	868	202	843	200	850	209	871

Table 21. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.



# Table 22. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Colleagues keen to use VC (Management)		Colleagues keen to use VC (Admin)		VC is equivalent to telephone		VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	52.2	81.5	30.9	41.4	37.4	44.3	22.5	21.9
False	21.7	2.9	33.7	14.8	48.5	36.0	61.2	62.1
Unable to say	26.1	15.6	35.4	43.7	14.1	19.7	16.3	15.9
Freq.	180	866	178	830	206	858	209	866

# Table 23. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate support available		Received adequate training		Sufficient internet connectivity		Adequate equipment is available	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	49.8	44.5	57.4	74.0	59.8	46.4	72.7	52.8
False	24.9	28.0	30.4	16.0	26.3	34.3	22.5	37.8
Unable to say	25.4	27.5	12.3	10.0	13.9	19.3	4.8	9.6
Freq.	205	863	204	862	209	865	209	865

# Table 24. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate space/rooms are available		Able to log VC in booking systems		Bookings are set up for VC		Concerns about security have been resolved	
	Primary Secondary		Primary	Secondary	Primary	Secondary	Primary	Secondary
True	83.7	41.4	44.8	64.9	28.3	58.0	53.1	46.0
False	12.5	45.6	36.8	12.5	54.9	18.2	16.5	13.4
Unable to say	3.8	13.0	18.4	22.6	16.8	23.8	30.4	40.6
Freq.	208	860	201	832	184	836	194	837



There were notable differences between Primary and Secondary care on the responses, in that Secondary care responded 'true' on more occasions than Primary care for the majority of the statements. Considering some examples, it seems that more professionals in Secondary care report the regular use of VC than Primary care, Secondary colleagues are keener to use VC, and their systems and bookings are adequately set up to allow for VC. However, Primary care were more positive in their responses for five of the statements, which were receiving adequate support, equipment, having sufficient internet connectivity, and that concerns about cyber security have been resolved.

**Community Care.** Once again, as there were only 6 respondents in Community care, these will be considered separately, as it is difficult to draw comparisons between Community care and Primary care and Secondary care due to the large differences in group sizes. The responses are displayed in Table 25 and Table 26.

Table 25. The distributions of responses to each of the statements regarding VC in Cor	nmunity
care.	

	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinicians keen to use VC	Management keen to use VC	Admin keen to use VC	VC is equivalent to TC	VC is equivalent to FTF
True	83.3	66.7	50.0	83.3	100.0	66.7	33.3	83.3
False	16.7	33.3	33.3	16.7	0.0	0.0	50.0	16.7
Unable to say	0.0	0.0	16.7	0.0	0.0	33.3	16.7	0.0
Freq.	6	6	6	6	6	6	6	6

#### Table 26. The distributions of responses to each of the statements regarding VC in Community

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security resolved
True	50.0	66.7	83.3	66.7	66.7	83.3	83.3	33.3
False	33.3	33.3	16.7	16.7	33.3	16.7	16.7	16.7
Unable to say	16.7	0.0	0.0	16.7	0.0	0.0	0.0	50.0
Freq.	6	6	6	6	6	6	6	6



The majority of professionals responded 'true' to all of the above statements, except for VC being the equivalent to TC and concerns about cyber security being resolved. This suggests that certain respondents do not believe VC to be the equivalent to TC, and that they are not all happy that their concerns about security when using VC have been resolved. However, overall, this is a positive view of VC within Community care for the six total respondents.

**Management and Administration.** The distribution of responses for Management and Administration are displayed in Figure 15 and Figure 16. The majority of responses to the statements were positive, except for four. These included whether the appointment was offered as a choice to the patient, that VC is the equivalent to FTF, and that adequate support and that adequate equipment is available. The majority of responses for these statements were 'false', suggesting that these may be rated lower by Management and Administration teams. However, the distributions of responses were still quite similar for 'true and false' for these statements, they were just rated slightly lower.



# Figure 15 (top) and 16 (bottom). The distribution of responses to the sixteen statements regarding VC for Management and Administration.







# Health Board Specific Data

Responses on the current survey came from the seven Welsh Health Boards, Aneurin Bevan University Health Board, Betsi Cadwaladr University Health Board, Cardiff and Vale University Health Board, Cwm Taf Morgannwg University Health Board, Hywel Dda University Health Board, Powys Teaching Health Board, and Swansea Bay University Health Board. Unfortunately, 12 respondents did not put a Health Board, and were counted as missing data. The number of responses from each Health Board are displayed in Table 27. The analyses of the all Health Boards will be considered individually.

Table 27. The number of responses and percentage of the total number of responses in each Health Board.

Health Board	Freq.	% of total	
ABUHB	378	30.4	
BCUHB	181	14.5	
CAVUHB	229	18.4	
СТМИНВ	85	6.8	
HDUHB	125	10.0	
PTHB	95	7.6	
SBUHB	117	9.4	

# Use of VC within Department or Service – All Wales

Professionals were also asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). Figure 17 displays the mean response, out of 100, per Health Board.



#### Figure 17 displays the mean responses in each Health Board.



### Platform Usage – All Wales

Respondents were asked the following question, "Do you use any of the following communication platforms for health and social care video consultations with your patients?"

They were given eight options to choose from, or they could respond 'other', stating the platform in an open-ended question box. The number of respondents using each platform type is displayed in Table 28. The 'Attend Anywhere' platform was the most commonly used platform across all Health Boards.

Platform	ABUHB	BCUHB	CAVUHB	CTMUHB	HDUHB	PTHB	SBUHB
FaceTime	24	6	4	5	5	2	11
WhatsApp	36	19	6	8	8	6	8
Facebook	1	0	1	1	4	0	1
Messenger Zoom	11	7	28	13	6	2	5
Skype	18	31	10	7	11	9	12
Microsoft Teams	142	24	19	10	37	19	45
Google Hangouts (and other google platforms)	1	2	0	0	2	0	0
Attend Anywhere	324	128	175	61	94	79	104
"Other"							
AccuRx	11	24	25	11	5	4	5
Ask My GP	0	0	0	0	0	0	2
CISCO	0	2	0	0	0	0	1
Clinic.co	0	0	0	0	0	0	1
Doxy.me	0	0	0	0	0	0	1
Duo	0	1	0	0	0	0	0
Hospify	0	0	1	0	0	0	0
Webex	0	11	0	0	0	1	1
Telephone Only	11	4	3	11	9	2	1

Table 28. The usage (frequency of respondents) of each platform per Health Board.

The next seven sections of this chapter will be split into individual Health Boards and their own specific data.



# Aneurin Bevan University Health Board (ABUHB)

There was a total of n = 378 responses in ABUHB. There were n = 68 males, n = 297 females, and n = 8 stated prefer not to say. The majority (n = 208) of respondents were 45-64, and n = 5 were 18-24, n = 152 were 25-44, and n = 1 was 65-80 years old.

## Should VC be used in ABUHB?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The majority of responses were for 'yes', suggesting that professionals in ABUHB believe that VC should be used for these appointments where appropriate. The responses are displayed in Figure 18.



Figure 18. The distribution of responses for should VC be used.

# Use of VC within Department/Service.

Also, professionals were also asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). There were n = 365 responses for this question. The mean response was 56.08 (SD = 30.61), which suggests that professionals in ABUHB perceive their use of VC to range between widespread and ad hoc. Nevertheless, based on the


high standard deviation, there is a widespread variation across the respondents from this Health Board.

#### Benefits of VC in ABUHB

There were thirteen questions included in this survey that asked respondents to rate how beneficial they believed possible advantages of VC were, on a 5-point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 29 and Table 30 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible advantages. These are discussed individually below.

	Saves time, space, and preparation.	Saves travel and parking	Saves travel and parking (patient)	Environmental benefits	Saves taking time off work.	Saves money (e.g., travel, childcare)
Not at all Beneficial	6.1	8.0	0.8	1.9	4.9	4.0
Not Beneficial	15.2	7.1	2.2	7.9	7.5	4.3
Quite Beneficial	21.0	13.1	8.2	17.3	20.4	18.6
Beneficial	29.6	23.1	28.6	28.5	29.9	32.0
Very beneficial	28.2	48.6	60.2	44.4	37.4	41.1
Freq.	362	350	367	365	348	350

### Table 29. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

## Table 30. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	4.5	1.6	9.5	11.2	6.6	1.4	13.3
Not Beneficial	7.8	4.9	17.5	17.3	18.2	2.2	19.2
Quite Beneficial	24.8	20.9	20.7	26.8	32.0	11.8	28.9
Beneficial	28.7	35.2	24.7	25.7	22.5	30.5	21.4
Very beneficial	34.3	37.4	27.6	19.0	20.7	54.1	17.2
Freq.	359	369	348	358	347	357	360



**Saves time, space, and preparation.** VC was seen to be 'very beneficial' for this advantage by 28.2% of the respondents, and a total of 57.8% believed this was 'beneficial', or 'very beneficial', which shows that professionals in ABUHB were positive about VC for this aspect.

**Saves travel and parking (professional and patient).** Considering the benefit of VC in terms of saving travel and parking, professionals perceived this to be more beneficial for the patients (60.2% 'very beneficial') than the professionals (48.6% 'very beneficial'). However, responses for both were relatively positive, with an 88.8% response rate for 'beneficial', and 'very beneficial' for patients, and 71.7% for the professionals.

**Environmental benefits.** VC was seen to be relatively beneficial for the environment, such that 72.7% of professionals stated that it was 'very beneficial' or 'beneficial' for this advantage.

**Saves taking time off work & saves money.** 67.3% of respondents stated that VC was 'very beneficial' or 'beneficial' for saving both themselves and patients time that would have needed to take off for other commitments, as well as 73.1% for saving money on aspects such as travel and childcare. Responses for both of these were generally positive.

**Improves access to care & Improves convenience.** Improving convenience was more beneficial than improving access to care, however both were still rated highly as being beneficial. 63% rated VC as being 'very beneficial' or 'beneficial' for improving access to care, and this was higher for improving convenience at 72.6%. This suggests that professionals see VC as being convenient for themselves and their patients, as well as improving access to care.

**Reduces wait times & reduces DNAs.** The responses for these two benefits were slightly less positive than some of the other benefits. The lower rated benefit was reducing the likelihood of DNAs, with 44.7% of professionals rating this as a 'very beneficial' or 'beneficial' advantage of VC. Reducing wait times was slightly more positive, with 52.3% of the responses for 'very beneficial' or 'beneficial'.

**Improving family involvement and support.** This benefit was also perceived as less positive than the others mentioned, with 43.2% of the responses rating this as 'very beneficial' or 'beneficial'.



**Lowers rates of infections.** This was the most positively rated aspect of VC from the respondents' perspectives, with over half of the responses rating it as 'very beneficial', and only 3.6% being 'not at all beneficial' or 'not beneficial'. This suggests that VC is a significant benefit for the reduction of infection rates.

**Lowering stress and anxiety.** Finally, VC was the least beneficial of all the advantages for lowering stress and anxiety levels of patients and themselves. This was perceived by 38.6% of professionals rating this 'very beneficial' or 'beneficial', and with 32.5% stating 'not at all beneficial' or 'not beneficial'. This suggests that VC, overall, may not aid in reducing these levels from the perspective of professionals.

### Challenges of VC in ABUHB

Eight different challenges were proposed to professionals that could potentially introduce difficulties with VC for themselves (Table 31) and for patients (Table 32). They were asked to rate the relevancy of the challenges on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	31.7	39.1	17.5	20.4	26.7	22.2	49.6
A little relevant	11.3	10.9	15.9	14.1	23.3	23.9	22.3
Relevant	20.4	15.8	21.0	28.8	25.3	27.1	16.9
Very Relevant	36.6	34.2	45.6	36.7	24.7	26.8	11.2
Freq.	372	368	377	368	360	347	349

## Table 31. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals.

### Table 32. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	1.6	0.5	0.3	5.4	7.4	5.4	1.6
A little relevant	8.8	10.4	8.0	19.1	24.0	24.3	15.5
Relevant	27.1	30.1	27.4	29.4	34.1	34.1	32.1
Very Relevant	62.5	59.0	64.4	46.1	34.6	36.2	50.8



Freq.	376	376	376	371	367	367	374

Overall, professionals viewed the above challenges as more relevant in causing difficulties with VC for patients more than themselves. Notable differences between professionals' and the perceptions of patients' views were for access to a device, internet connection, and issues with connectivity, as well as having a lack of confidence using VC. The comparisons between these responses are displayed in Figures 19-22.

Figure 19. The distribution of relevancy ratings for challenges introduced by having access to a device, for professionals and patients.



Figure 20. The distribution of relevancy ratings for challenges introduced by having access to internet, for professionals and patients.







Figure 21. The distribution of relevancy ratings for challenges introduced by having poor internet connectivity, for professionals and patients.

Figure 22. The distribution of relevancy ratings for challenges introduced by having a lack of confidence, for professionals and patients.



The most relevant challenge for professionals was having poor internet connectivity, and the least relevant was having a lack of confidence. For the patients, the professionals perceived the biggest challenge to be accessing a device to use for VC, and the least relevant was having adequate support from family and friends.

**Preference for FTF or TC:** In addition to the above challenges, respondents were also asked whether a preference for FTF or TC would impact VC for both themselves and for patients. The responses for professionals were more positive



than patients, such that this challenge was more relevant in introducing difficulties for patients, as demonstrated in Figure 23.





### Statements of VC Use in ABUHB

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether the statements were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 33 and Table 34.

Table 33.	The distr	ributions of	responses to	each of t	he statement	s regardi	ng VC.	
	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinician keen to use VC	Management keen to use VC	Admin keen to use VC	VC equivalent to TC	VC is equivalent to FTF
True	78.2	39.3	41.4	63.1	75.0	36.3	44.7	21.1
False	15.4	40.7	30.8	11.9	4.3	17.7	33.2	62.3
Unable to say	6.4	19.9	27.8	24.9	20.7	45.9	22.1	16.6
Freq.	377	366	360	377	368	355	371	374

#### Table 34. The distributions of responses to each of the statements regarding VC.

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security resolved
True	47.4	70.6	46.0	49.7	47.2	56.4	50.0	43.6
False	25.1	18.9	35.0	40.6	42.9	15.1	22.9	15.4
Unable to say	27.5	10.5	19.0	9.7	10.0	28.5	27.1	41.1
Freq.	371	371	374	372	371	351	354	358



**Regularly use VC.** The response to this statement were positive, 78.2% of respondents stated they were regularly using VC ('true'), and only 15.4% were not ('false').

**Appointment offered as a choice to patient.** 40.7% of professionals responded 'false' to this statement, and 39.3% responded 'true', suggesting that patient choice was fairly mixed in ABUHB in that there was only a 1.4% difference between 'true' and 'false' responses. In addition, 19.9% were uncertain of this statement.

**Dedicated team implementing VC.** Once again, responses to this statement were fairly mixed, in that 41.4% of respondents stated 'true', 30.8% stated 'false', and 27.8% were uncertain.

**Colleagues keen to use VC**. With regards to colleagues being keen to use VC, the highest proportion of 'true' responses were for Management colleagues being keen to implement VC (75%), followed by clinical colleagues (63.1%), and then administration (36.3%). However, the majority of the responses for administrative colleagues were for 'unable to say', suggesting that professionals are unaware of how keen their colleagues are to use VC.

**VC is equivalent to TC and FTF.** Comparing TC and FTF responses, respondents rated VC as being the equivalent to TC (44.7% 'true') more than FTF (21.1% 'true'). The discrepancy between FTF and VC is evident, whether this is positive or negative however, is unknown from these figures.

Adequate support, training, internet, equipment, and space/rooms. The statement that received the most positive responses was for having received adequate training, where 70.6% of professionals responded 'true' to this statement. The majority of responses for the remaining statements were 'true', and response rates were fairly similar. However, there was a higher frequency of 'false' responses for having adequate equipment available, with almost as many of these as 'true'.

Able to log VC & booking systems are set up. Responses to these statements demonstrate that 50% of respondents have, within their services or departments, booking systems that are set up and allow for the logging of VC appointments.

**Concerns about security have been resolved**. 43.6% of professionals stated that their cyber security issues had been resolved. However, 41.1% were unable



to say, perhaps suggesting that they had not encountered these problems, or uncertain of this type of issue.

### ABUHB Care Sector Split

There were n = 47 responses from Primary care, n = 280 in Secondary, n = 1 in Community, and n = 9 for Management and Administration. A total of n = 41 respondents stated "Other", but did not report their specialty or profession, or did not respond at all. Thus, these were excluded.

**Respondent demographics.** Table 35 displays the demographics of respondents in each care sector in ABUHB. The one individual in Community care was female and aged 25-44.

	Primary		Second	ary	Managen	nent/Admin
Gender	Freq.	%	Freq.	%	Freq.	%
Male	15	31.9	39	14.2	0	0.0
Female	29	61.7	231	84.0	9	100.0
Non-Binary	0	0	0	0.0	0	0.0
PNTS	3	6.4	5	1.8	0	0.0
Freq.	47		275		9	
Age						
18-24	14	31.1	3	1.1	0	0.0
25-44	0	0.0	122	45.0	2	25.0
45-64	30	66.7	146	53.9	6	75.0
65-80	1	2.2	0	0.0	0	0.0
Over 80	0	0.0	0	0.0	0	0.0
Freq.	45	•	271	•	8	

Table 35 displays the demographics of respondents in each care sector in ABUHB.

### Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (if it is appropriate, and no physical examination or blood test is required)". They were given the options, 'yes', 'no', and 'maybe'.

The responses to this question for each care sector, as well as Management and Administration, are displayed in Figure 24. Overall, Primary and Secondary care were similar in their responses, with 63.8% responding 'yes' in Primary care, and 69.5% in Secondary care. No professionals in Primary care stated that VC should not be used, and instead, 36.2% stated that it should 'maybe' be used. In comparison, 1.8% in Secondary care said 'no', that VC should not be used, as well as 28.7% stating 'maybe'. This difference between these care sectors



may be due to the larger number of responses in Secondary care (n = 279) when compared with Primary (n = 47). All of respondents for Management and Administration stated that it should be used, and the one respondent in Community care said 'maybe'.





### Use of VC within Department/Service.

The responses to where professionals rated their service or department on the scale from 0 (ad hoc) to 100 (widespread routine practice) in each care sector are displayed in Figure 25. There was only one response in Community care and their rating was 28.0. It is also important to note there was only 9 responses in Management and Administration. The responses suggest, however, that Secondary care respondents (n = 271) perceive their department or service to be more widespread, with a mean score of 60.65 (SD = 27.92), compared with Primary care (n = 45), giving a mean rating of 32.67 (SD = 32.23). Statistical comparisons could not be conducted due to the large differences in the number of respondents in the care sectors. Nevertheless, based on the high standard deviation, there seems to be a widespread variation across care sectors.





Figure 25. The mean scores of the question regarding the usage of VC within the professionals' department/service in each care sector.

### Benefits

The responses to the thirteen possible benefits of VC are displayed in Tables 8-11 for both Primary and Secondary care, to see the differences (if any) between the two care sectors. Community care and Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary.

**Primary and Secondary care.** The responses for Primary and Secondary care are displayed in Tables 36-39. Secondary care was more positive in their beneficial ratings than Primary care, in general. However, they were similar for four of the potential benefits of VC, which were improving access to care, improving convenience, reducing wait times, and reducing the likelihood of DNAs.



# Table 36. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

		me, space, eparation.		ravel and Irking	Saves travel and parking (patient)		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not at all Beneficial	14.3	5.6	16.7	6.9	0.0	0.7	
Not Beneficial	21.4	14.4	16.7	5.3	2.3	2.6	
Quite Beneficial	31.0	19.3	21.4	12.2	20.9	6.6	
Beneficial	16.7	30.7	21.4	22.9	30.2	25.5	
Very beneficial	16.7	30.0	23.8	52.7	46.5	64.6	
Freq.	42	270	42	262	43	274	

# Table 37. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

	Environme	ental benefits		king time off vork.	Saves money (e.g travel, childcare).		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not at all Beneficial	4.7	1.4	2.4	5.8	0.0	4.2	
Not Beneficial	20.9	6.5	4.8	8.1	4.8	5.0	
Quite Beneficial	11.6	18.5	31.0	18.1	33.3	17.3	
Beneficial	37.2	25.0	40.5	28.1	40.5	27.7	
Very beneficial	25.6	48.6	21.4	40.0	21.4	45.8	
Freq.	43	276	42	260	42	260	

# Table 38. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

	Improve	s access to	Imp	proves	Reduces	wait times
	c	care	conv	enience		
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	4.9	4.8	0.0	1.8	14.3	8.9
Not Beneficial	14.6	7.7	4.5	5.8	33.3	15.4
Quite Beneficial	34.1	22.9	38.6	19.6	16.7	22.4
Beneficial	17.1	29.2	25.0	34.8	14.3	24.7
Very beneficial	29.3	35.4	31.8	38.0	21.4	28.6
Freq.	41	271	44	276	42	259

## Table 39. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

	Reduces likelihood of DNAs		Improves family involvement and support		Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	6.8	12.8	9.5	6.2	7.1	0.7	25.6	12.7
Not Beneficial	22.7	17.0	19.0	18.2	9.5	1.1	23.3	18.7
Quite Beneficial	27.3	26.0	45.2	30.6	14.3	12.0	23.3	30.3
Beneficial	27.3	25.7	16.7	22.5	35.7	28.5	20.9	19.5
Very beneficial	15.9	18.5	9.5	22.5	33.3	57.7	7.0	18.7
Freq.	44	265	42	258	42	267	43	267

**Community care.** Five of the above benefits of VC were rated as being 'beneficial' to the one individual in Community care, these were saving time, space, and preparation, travel, patient travel, environmental benefits, and lowering the rates of infection. All others were rated 'quite beneficial', except for reducing the likelihood of DNAs, which was considered as 'not beneficial'.

**Management and Administration.** There were only 9 respondents for Management and Administration, their responses are displayed in Figure 26 and Figure 27. Response numbers ranged from 7-9. Overall, the responses were positive, there were no responses for 'not at all beneficial', and only one for 'not beneficial'.



## Figure 26 and Figure 27. The distributions of responses to how 'beneficial' each possible advantage is, according to Administration and Management teams.





### Challenges

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for themselves and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These will be considered for Primary and Secondary care, to see the differences (if any) between the two care sectors. Community care, Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary care.



46

Freq.

277

45

**Primary and Secondary:** Table 40-43 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (12 and 13) and patients (14 and 15), in Primary and Secondary care.

Access to a No / Cost Poor internet Safe Space of internet device connection Primary Secondary Primary Secondary Primary Secondary Primary Secondary 39.1 40.1 19.1 17.2 40.0 17.3 Not 29.6 35.6 relevant A little 10.6 10.9 12.3 11.1 14.9 15.8 8.9 14.3 relevant Relevant 13.0 21.7 13.3 16.8 12.8 22.2 15.6 31.3 37.0 40.0 32.5 53.2 35.6 37.1 Very 36.5 44.8 Relevant

Table 40. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

Table 41. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

274

47

279

45

272

	No service support		Not appropr	iate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	29.5	27.2	26.8	20.5	37.5	51.9	
A little relevant	18.2	23.8	17.1	24.8	35.0	21.8	
Relevant	15.9	26.8	26.8	27.5	20.0	15.6	
Very Relevant	36.4	22.3	29.3	27.1	7.5	10.7	
Freq.	44	265	41	258	40	262	



## Table 42. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	2.1	1.4	0.0	0.4	0.0	0.4	0.0	5.8
A little relevant	4.3	10.4	4.3	11.1	4.3	8.2	14.9	19.2
Relevant	19.1	28.6	25.5	31.4	19.1	28.9	29.8	30.8
Very Relevant	74.5	59.6	70.2	57.1	76.6	62.5	55.3	44.2
Freq.	47	280	47	280	47	280	47	276

Table 43. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Adequate support		Not approp	riate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	4.4	8.0	4.3	6.2	0.0	1.8	
A little relevant	24.4	25.2	21.3	25.3	14.9	15.8	
Relevant	31.1	33.9	29.8	32.2	36.2	32.7	
Very Relevant	40.0	32.8	44.7	36.3	48.9	49.6	
Freq.	45	274	47	273	47	278	

The findings in the tables above suggest that Primary and Secondary care are similar in their ratings of how relevant the challenges are when using VC, for professionals and patients. The largest differences between the respondents in Primary and Secondary care were for accessing a device (patient), access to sufficient internet (patient), and lacking service support (professional).

There were differences between the professionals' challenges and their perceptions of patients for the majority of potential challenges, except three, these were lack of support, not appropriate or suitable, and having access to a safe space. However, professionals' perceptions of patients' difficulties with VC for these challenges were still more relevant than their own. The largest difference between the relevancy ratings were for lacking the confidence to



use VC, with professionals believing that patients would find more difficulty with VC due to a lack of confidence.

**Preference for FTF or TC**. In addition to the challenges above, professionals were asked if a preference for FTF would introduce difficulties with VC for themselves and their patients. Firstly, there were differences between Primary and Secondary care on the relevancy ratings for this challenge causing difficulties with VC. In particular, 41.9% of Primary care professionals rated this as 'very relevant', compared with only 26.1% in Secondary care.

Secondly, there was not much difference between the relevancy ratings given for Primary professionals (41.9% 'very relevant') and the ratings they gave for patients (44.7% 'very relevant'), suggesting that professionals view their own and patients' preference for FTF or TC as introducing difficulties with VC. However, there was a difference between these perceptions in Secondary care, with 26.1% of professionals rating this as 'very relevant' for themselves, compared with 48.4% for patients. These responses are displayed in Figure 28 and Figure 29.









**Community care.** For the one respondent in Community care, the majority of responses for the professional's challenges were 'not relevant' except for having a preference for FTF or TC, where this was 'relevant'. On the other hand, for patients' challenges, they were all given 'a little relevant' or 'relevant', except for access to a device and having no access to internet, which were 'not at all relevant'.

**Management and Administration.** Overall, Management and Administration rated patient difficulties as more relevant than professionals. The most relevant, for both patient and professionals, was reported as access to a device, and the largest discrepancy between the patient and professionals' difficulties seemed to be for the preference for FTF or TC, which was perceived as more relevant for patients. These responses are displayed in Figure 30 and Figure 31.



Figure 30 (top) and Figure 31 (bottom). The distributions of relevancy ratings for difficulties with VC for the professional (top) and patient (bottom), for Management and Administration respondents.





### Statements

Sixteen different statements regarding VC were given to respondents. They were asked to state whether the statements were 'true', 'false', or if they were 'unable to say'. These are considered for Primary and Secondary care, to see the differences (if any) between the two care sectors, and Community care and Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary.

**Primary and Secondary care.** The distributions of responses to the statements are displayed in Tables 44-47 for Primary and Secondary care.

	Regularly use VC		VC Appointment offered as a choice to patient		Dedicated team implementing VC		Clinician keen to use VC	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	57.4	82.1	28.3	42.0	25.0	45.7	53.2	66.1
False	34.0	11.4	58.7	35.8	61.0	21.3	27.7	8.6
Unable to say	8.5	6.4	13.0	22.3	13.6	33.0	19.1	25.4
Freq.	47	280	46	274	44	267	47	280

Table 44. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

## Table 45. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Management keen to use VC		Admin keen to use VC		VC is ea	quivalent to TC	VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	42.5	81.0	19.5	38.7	28.3	46.5	19.6	20.1
False	27.5	1.1	39.0	13.0	54.3	28.4	63.0	63.1
Unable to say	30.0	17.9	41.5	48.3	17.4	25.1	17.4	16.8
Freq.	40	279	41	269	46	275	46	279



### Table 46. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate support available		Received adequate training			ent internet nectivity	Adequate equipment is available		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
True	51.1	45.7	69.6	71.0	57.4	45.3	70.2	45.7	
False	25.5	25.4	17.4	19.2	25.5	35.3	25.5	43.8	
Unable to say	23.4	29.0	13.0	9.8	17.0	19.4	4.3	10.5	
Freq.	47	276	46	276	47	278	47	276	

### Table 47. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate space/rooms are available		Able to log VC in booking systems			s are set up or VC	Concerns about security have been resolved		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
True	82.6	40.4	55.3	57.1	33.3	53.6	55.6	42.6	
False	10.9	48.4	21.3	12.7	40.5	17.6	17.8	13.0	
Unable to say	6.5	11.2	23.4	30.1	26.2	28.8	26.7	44.4	
Freq.	46	277	47	259	42	267	45	270	

Overall, Secondary care was more positive than Primary care in terms of responses, except for having adequate support available, sufficient internet connectivity, and concerns about cyber security being resolved. For these statements, Primary care had a higher proportion of 'true' responses.

The statements with the largest differences between the numbers of 'true' responses given by professionals in the care sectors were for the regular use of VC and having adequate equipment and space/rooms available. In particular, there was a higher frequency of Secondary care professionals reporting the regular use of VC than Primary care. Primary care, on the other hand, had more responses for 'true' where statements referred to having adequate equipment and clinical space/rooms.



Both care sectors were similar in their responses for receiving adequate training, which was also the statement that received the highest proportion of 'true' responses, overall.

**Community care.** The one individual in Community care responded 'true' to the majority of the statements, except for four. These were VC being comparable to FTF, receiving adequate support and access to equipment, and that their cyber security concerns had been resolved.

**Management and Administration.** The majority of responses to the statements were positive, with the most being 'true', except for having sufficient internet connectivity, adequate equipment, adequate space/rooms, having a team dedicated to implementing VC, and that the appointment is being offered to the patient, where the majority of responses to these were 'false'. This suggests that this group of individuals perceive aspects of their VC experience to be missing. These responses are displayed in Figure 32 and Figure 33.



Figure 32 and Figure 33. The distribution of responses to the sixteen statements regarding VC for Management and Administration.





### Summary of ABUHB

The analysis of the data revealed some interesting findings in terms of professionals' opinions, as a result of asking them to reflect on their previous experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding their use of VC, even when faced with the potential challenges that may be encountered when using VC.

The majority of professionals in ABUHB felt that VC should be used when it is appropriate, with some professionals exhibiting hesitancy in their decision. On a positive note, there was only a very small proportion of professionals who believe VC should not be used entirely. For the care sectors in particular, a more positive response was observed for Secondary care when compared with Primary care, however, overall the responses were very similar and no Primary care professionals stated it should not be used. All of the Management and Administration respondents stated it should be used. Thus, this suggests that the vast majority of professionals, although they are uncertain whether it should definitely be used, believe that it should not be completely rejected. In



addition, when asked to consider their department/service's usage of VC, the professionals across ABUHB identified their usage was slightly more routinely used than just when necessary. This implies that professionals' usage is more than just when VC is needed and is used more routinely as part of their service, a positive response. It was also evident that Secondary care reported more widespread usage of VC in comparison to Primary care, whereby Primary professionals' usage was more towards only when necessary, identifying a gap to fill for Primary care professionals.

Overall, professionals in ABUHB rated VC positively and beneficial for the outcomes of VC. Secondary care was revealed to be more positive in their responses for the majority of the benefits, however, overall, all care sectors exhibited positive opinions regarding VC. In particular, VC was seen to benefit the patient, in that it allowed for a reduction in the time taken to travel (and park) to and from their appointments, and reduced the risks of viral transmission. On the other hand, one aspect of VC that received less favourable responses compared with the others was the reduction of DNAs received more, although this was still viewed as positive by a relatively large proportion of professionals.

Moving on and considering the challenges encountered with VC, professionals believed that these challenges introduced greater difficulty for patients than themselves, such as technological restraints and lacking confidence. However, issues, such as poor internet connectivity, were still relevant for professionals. Overall, these findings highlight that lower rated aspects of VC are typically perceived from a technological perspective. For Primary and Secondary care, similarities emerged in the relevancy of the challenges, as well as these being more relevant for patients. The most relevant challenge for both, for instance, was the lack of sufficient internet connectivity (professionals and patients). Similar findings were identified for the Community care respondent and Management and Administration.



Finally, respondents were given a series of statements to capture an idea of their perceptions of VC. It was revealed that large proportions of respondents were regularly using VC, their colleagues were keen to make use (including Management and other professionals), and that they had received adequate training to enable them to use VC. On the other hand, professionals were not happy to say that VC was the equivalent to FTF, which suggests that VC does not fully replace or fulfils the needs of professionals as FTF does. Furthermore, there were many respondents that stated they did not have access to sufficient equipment, space to conduct VC, or internet connectivity. These areas also emerged as difficult for Secondary care, specifically, with high numbers of 'false' responses for these statements, suggesting that Secondary care professionals may experience difficulties with VC due to a lack of availability of adequate resources. Community care, Management and Administration also responded positively, except for, once again, VC being the equivalent to FTF.

In summary, the responses in ABUHB were positive, and there were minimal differences between Primary and Secondary care, although Secondary care professionals seemed slightly more positive than Primary. These findings suggest that overall, there is an acceptability of VC amongst professionals, and that their opinions of VC allow for the implementation of it within their department or service. This retrospective data implies positive responses from professionals regarding VC usage, although challenges are faced by professionals and their patients such as internet connection and device access, potentially introducing barriers in terms of accessing healthcare.



### Betsi Cadwaladr University Health Board (BCUHB)

There was a total of n = 181 responses in BCUHB. There were n = 43 males, n = 130 females, n = 5 stated prefer not to say, and n = 3 chose not to report their gender. There were n = 86 between the ages of 25 and 44, n = 87 45-64, and n = 1 who was over 80 years old.

### Should VC be used in BCUHB?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The majority of responses were for 'yes', and interestingly, there were no responses for 'no', which means that all professionals in this survey in BCUHB thought that VC should or should maybe be used (Figure 34).



Figure 34. The distribution of responses for should VC be used.

### Use of VC within Department/Service.

Also, professionals were also asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). There were 176 responses for this question. The mean response was 42.90 (SD = 32.33), which suggests that professionals in BCUHB perceive their use of VC within their department or service to be between ad hoc and widespread use.



Nevertheless, based on the high standard deviation, there is a widespread variation across the professionals in BCUHB.

### Benefits of VC for BCUHB

There were thirteen questions included in this survey that asked respondents to rate how beneficial they believed possible advantages/outcomes of VC were, on a 5-point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 48 and Table 49 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible benefits. These are discussed individually below.

	Saves time, space, and preparation.	Saves travel and parking	Saves travel and parking (patient)	Environmental benefits	Saves taking time off work.	Saves money (e.g., travel, childcare)
Not at all Beneficial	6.1	9.8	1.1	2.8	5.5	5.3
Not Beneficial	16.8	9.1	1.1	5.0	9.7	2.3
Quite Beneficial	18.4	12.8	10.8	16.2	13.9	14.6
Beneficial	19.6	18.3	17.6	27.4	23.0	29.8
Very beneficial	39.1	50.0	69.3	48.6	47.9	48.0
Freq.	179	164	176	179	165	171

Table 48. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

Table 49. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	5.6	1.7	11.2	9.4	4.2	1.1	8.2
Not Beneficial	6.7	2.8	14.8	18.1	14.9	1.1	13.5
Quite Beneficial	19.1	16.9	27.2	21.1	30.4	9.7	31.8
Beneficial	29.2	31.6	19.5	25.1	25.6	27.8	23.5
Very beneficial	39.3	46.9	27.2	26.3	25.0	60.2	22.9
Freq.	178	177	169	171	168	176	170



**Saves time, space, and preparation**. This benefit of VC was perceived by 58.7% of respondents as 'very beneficial' or 'beneficial', suggesting that the majority of respondents in BCUHB perceived VC to be beneficial for saving time, space, preparation.

**Saves travel and parking (professional & patient).** VC was seen as being beneficial for saving both the professionals' and the patients' travel time. However, it was seen as more beneficial by more respondents for the patient, with 86.9% of responses being for 'very beneficial' or 'beneficial', compared with 68.3% for the professionals. Only 2.2% of professionals responded either 'not beneficial' or 'not at all beneficial' for saving patients' travel, such that this was the highest rated benefit perceived for patients in BCUHB.

**Environmental benefits.** VC was seen as being 'very beneficial' or 'beneficial' for the environment by 76% of respondents.

**Saves taking time off work and saves money.** The benefit in saving themselves and their patients taking time off work for other commitments was reported by 70.9% of respondents as 'very beneficial' or 'beneficial'. In addition, 77.8% reported that this also saved themselves and patients money on travel and childcare, which was considered as 'very beneficial' or 'beneficial'.

**Improves access to care and convenience.** Improving access to care was rated less beneficial than improving convenience. However, 68.5% of responses were for considered 'very beneficial' or 'beneficial'. For improving convenience, there were 78.5% of the responses for 'very beneficial' and 'beneficial', suggesting that VC was seen to be convenient for both themselves and their patients.

**Reducing wait times and the likelihood of DNAs**. These aspects of VC were rated given slightly less positive ratings than the others, with 46.7% of responses for VC being 'very beneficial' or 'beneficial' for reducing wait times, and 51.4% for reducing the likelihood of DNAs. These both also had the highest proportion of responses for 'not at all beneficial' (11.4% for wait times, and 9.4% for DNAs).

**Improves family involvement and support.** This aspect was also rated less beneficial, with 50.6% of professionals who believed VC to be 'very beneficial' or 'beneficial' for improving family involvement with their patient care. However, an additional 30.4% of the responses felt it was 'quite beneficial'.



Lowers rates of infection. VC was seen as 'very beneficial' and 'beneficial' for reducing the rates of infection by 88% of respondents, and only 2.2% of BCUHB professionals rated this aspect as 'not beneficial' or 'not at all beneficial'. This suggests that lowering the rates of infection is one of the most beneficial aspects of VC.

**Lowers rates of stress.** With the lowest proportion of responses for 'very beneficial' and 'beneficial' at 46.4%, VC was seen as the least beneficial of all for lowering rates of stress and anxiety in themselves and patients. However, 31.8% felt that this aspect may be 'quite beneficial'.

### Challenges of VC for BCUHB

Eight different challenges were proposed to professionals that could potentially make VC difficult for themselves (Table 50) and for patients (Table 51). Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

make VC fo	r professior	hals.					
	Access	No /	Poor	Safe	No	Not	Lack of
	to a	Cost of	internet	Space	service	appropriate	confidence
	device	internet	connection		support	or suitable	
Not	43.7	49.7	23.6	30.5	39.4	34.2	56.5
relevant							
A little relevant	5.7	7.7	16.9	14.9	18.8	21.1	18.8
Relevant	20.7	11.2	15.7	21.3	23.5	22.4	13.5
Very Relevant	29.9	31.4	43.8	33.3	18.2	22.4	11.2
Freq.	174	169	178	174	170	161	170

Table 50. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals.

	Access	No /	Poor	Safe	Adequate	Not	Lack of
	to a	Cost of	internet	Space	support	appropriate	confidence
	device	internet	connection			or suitable	
Not relevant	1.7	1.1	0.0	10.3	9.1	9.8	2.8
A little relevant	9.9	12.2	9.9	24.0	28.4	26.4	19.4
Relevant	27.6	33.1	28.2	28.6	35.8	32.8	28.9
Very Relevant	60.8	53.6	61.9	37.1	26.7	31.0	48.9
Freq.	181	181	181	175	176	174	180

Table 51. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

Overall, professionals viewed the challenges above as more relevant for their patients than themselves. Notable differences include access to a device and a lack of confidence. These responses are displayed in Figure 35 and 36.

The most relevant challenge with VC was having poor internet connection for professionals (43.8% 'very relevant') as well as for their patients (61.9% 'very relevant'). The least relevant, on the other hand, for professionals was having a lack of confidence introducing difficulties with VC. For their patients, the least relevant were having a safe space and receiving adequate support from family and friends.



Figure 35. The distribution of relevancy ratings for challenges introduced by having access to a device, for professionals and patients.





**Preference of FTF or TC.** In addition to the above challenges that may introduce difficulties, professionals were also asked whether a preference for FTF or TC would impact VC for both professionals and for patients. This challenges was less relevant for professionals, with more responses for 'not relevant' given for professionals than for patients, displayed in Figure 37.







#### Statements of VC Use in BCUHB

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 52 and Table 53.

Table 52	. The distr	ibutions of r	esponses to	each of t	he stateme	nts rega	rding VC.	
	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinicians keen to use VC	Management keen to use VC	Admin keen to use VC	VC is equivalent to TC	VC is equivalent to FTF
True	65.6	45.2	56.0	72.8	75.9	38.7	42.4	26.8
False	28.9	45.2	34.2	11.1	6.5	14.8	40.6	58.7
Unable to say	5.6	9.5	9.7	16.1	17.6	46.5	17.1	14.5
Freq.	180	168	175	180	170	155	175	179

#### Table 53. The distributions of responses to each of the statements regarding VC.

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security have been resolved
True	52.3	69.7	52.0	62.0	48.6	71.6	66.5	53.6
False	27.6	21.3	33.5	31.8	41.9	15.9	22.8	13.3
Unable to say	20.1	9.0	14.5	6.1	9.5	12.5	10.8	33.1
Freq.	174	178	179	179	179	176	167	166

**Regularly use VC.** Two-thirds (65.6%) of the respondents responded 'true' to using VC regularly, with 28.9% responding false, and 5.6% as unable to say. This suggests the majority of professionals and regularly using VC in BCUHB.

**Appointment offered as a choice to patient.** The same proportion of respondents responded 'true' (45.2%) to this statement as they did 'false' (45.2%), suggesting that almost half are offering the choice, and the other half do not. However, 9.5% were uncertain of this statement.

**Dedicated team implementing VC.** 56% of respondents stated that there was a team that was dedicated to implementing VC, with 34.2% reporting this statement as 'false'. In addition, 9.7% were uncertain of this statement.



**Colleagues keen to use VC.** Professionals reported their clinical colleagues (72.8%) and Management colleagues (75.9%) as being as keen to use VC, with administrative colleagues being the least keen (38.7%). However, 46.5% of respondents were unable to say whether their administrative colleagues were keen, suggesting they are unaware of this.

VC is equivalent to TC or FTF. More professionals reported that VC was the equivalent to TC than not, however, these two responses were very similar (42.4% for 'true', 40.6% for 'false'). Alternatively, more than half (58.7%) of responses were 'false' when asked if VC is the equivalent to FTF, whereas 26.8% reported this as 'true'.

Adequate support, training, internet, equipment, and space/rooms. The most positive of these statements was for receiving adequate training, with 69.7% of responses being 'true'. The least positive, on the other hand, was for having adequate space/rooms available.

Able to log VC & booking systems are set up. The responses to these statements were positive, and this was evident by 71.6% of respondents stating 'true' to being able to log VC, and 66.5% stated 'true' for their booking systems being set up for VC.

**Concerns about security.** 53.6% of professionals stated their cyber security concerns had been resolved, and only 13.3% stated they had not. In addition, 33% were uncertain of this statement, suggesting that they may not have encountered these issues.

### Care Sector Findings

This section will consider the findings from Primary, Secondary, and Community care, as well as responses from Management and Administration. There were n = 47 responses from Primary care, n = 115 in Secondary, n = 2 in Community, and n = 3 for Management and Administration. A total of n = 14 respondents stated "Other", but did not report their specialty or profession, or did not respond at all. Thus, these were excluded.

**Respondent demographics.** Table 54 displays the demographics of respondents in Primary and Secondary care in BCUHB. Both respondents in Community care were male, and n = 1 was 24-44 and the other was 45-64 years old. In Management and Administration, n = 2 were female, n = 1



reported they preferred not to say. The ages were 25-44 and over 80 years old (one did not state their age).

	Primary		Secondary	
Gender	Freq.	%	Freq.	%
Male	17	36.2	19	16.8
Female	28	59.6	92	81.4
Non-Binary	0	0.0	0	0.0
PNTS	2	4.3	2	1.8
Freq.	47		113	
Age		·		·
18-24	0	0.0	0	0.0
25-44	15	32.6	63	56.8
45-64	31	67.4	48	43.2
65-80	0	0.0	0	0.0
Over 80	0	0.0	0	0.0
Freq.	46		111	·

#### Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The response to this question for each care sector, as well as Management and Administration is displayed in Figure 38. All of the responses in Community care, and Management and Administration stated that VC should be used. As shown in Figure 5, the responses for Primary and Secondary care were very similar, and there was only 0.3% of a difference between the numbers of responses for 'yes' in each. There were no responses for 'no', and around 6% were 'maybe' for each of the two care sectors.





#### Figure 38. The distributions of responses to should VC be used in Primary and Secondary.

#### **Benefits**

The responses to the thirteen possible benefits of VC are displayed in Tables 8-11 for both Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Community care, Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary.

#### Primary and Secondary care

The responses for Primary and Secondary care are displayed in Tables 55-58. In general, Secondary care were more positive in their responses than Primary care, except for improving access to care, reducing wait times, and reducing the likelihood of DNAs, where Primary care professionals were more positive. They were both very similar in their ratings for the VC being beneficial for improving convenience. The possible advantage that was rated the most beneficial by both care sectors was saving patient travel and parking. On the other hand, the least beneficial for Primary care was reducing levels of stress and anxiety and for Secondary care, this was reducing the likelihood of DNAs.



### Table 55. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

		me, space, eparation.		ravel and Irking	Saves travel and parking (patient)		
	Primary	imary Secondary		Secondary	Primary	Secondary	
Not at all Beneficial	8.5	6.2	6.8	11.5	2.3	0.9	
Not Beneficial	14.9	15.0	11.4	5.8	0.0	1.8	
Quite Beneficial	12.8	21.2	20.5	9.6	20.5	7.1	
Beneficial	29.8	13.3	22.7	16.3	25.0	15.9	
Very beneficial	34.0	44.2	38.6	56.7	52.3	74.3	
Freq.	47	113	44	104	44	113	

## Table 56. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Environme	ental benefits		king time off vork.	Saves money (e.g. travel, childcare).		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not at all Beneficial	0.0	3.5	2.3	7.7	0.0	6.4	
Not Beneficial	2.2	5.2	2.3	10.6	0.0	2.8	
Quite Beneficial	22.2	12.2	22.7	10.6	20.5	11.9	
Beneficial	31.1	25.2	27.3	20.2	31.8	29.4	
Very beneficial	44.4	53.9	45.5	51.0	47.7	49.5	
Freq.	45	115	44	104	44	109	

## Table 57. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Improve	s access to	Imp	oroves	Reduces wait times	
	care		conve	enience		
	Primary Secondary		Primary	Secondary	Primary	Secondary
Not at all Beneficial	2.2	6.2	2.1	1.8	9.1	12.1
Not Beneficial	15.2	4.4	4.3	2.7	11.4	15.9
Quite Beneficial	15.2	21.2	14.9	18.0	22.7	28.0
Beneficial	23.9	29.2	29.8	28.8	18.2	19.6
Very beneficial	43.5	38.9	48.9	48.6	38.6	24.3
Freq.	46	113	47	111	44	107



## Table 58. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Reduces likelihood of DNAs		Improves family involvement and support		Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	4.4	11.0	2.3	5.6	2.2	0.9	13.0	7.4
Not Beneficial	22.2	17.4	16.3	14.8	2.2	0.9	21.7	9.3
Quite Beneficial	13.3	22.0	37.2	26.9	13.0	6.3	26.1	33.3
Beneficial	17.8	28.4	23.3	25.9	37.0	24.3	21.7	23.1
Very beneficial	42.2	21.1	20.9	26.9	45.7	67.6	17.4	26.9
Freq.	45	109	43	108	46	111	46	108

**Community care.** There were no responses in Community care that stated the possible advantages were 'not beneficial' or 'not at all beneficial', and they were all rated as either 'quite beneficial', 'beneficial', or 'very beneficial'.

**Management and Administration.** Responses were mixed for the respondents in this sector, however, there were only 2-3 responses per possible advantage. All three respondents rated saving patient travel and parking and lowering rates of infection as 'very beneficial'. For the remaining benefits, two respondents rated highly in terms of benefits, but there was one professional who rated VC as less beneficial.

### Challenges

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Community care, Management and Administration are discussed individually below, as once again, they both had smaller group sizes.

**Primary and Secondary.** Table 59-62 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (59 and 60) and patients (61 and 62), in Primary and Secondary care.


### Table 59. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	46.7	42.2	50.0	47.7	28.9	21.2	44.4	23.4
A little relevant	0.0	9.2	2.3	11.2	11.1	20.4	13.3	17.1
Relevant	20.0	22.9	9.1	13.1	15.6	15.9	22.2	21.6
Very Relevant	33.3	25.7	38.6	28.0	44.4	42.5	20.0	37.8
Freq.	45	109	44	107	45	113	45	111

### Table 60. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	No serv	ice support		ropriate or table	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	39.5	38.5	31.7	34.3	58.1	55.9	
A little relevant	16.3	22.9	19.5	22.9	18.6	19.8	
Relevant	25.6	22.0	26.8	21.0	20.9	10.8	
Very Relevant	18.6	16.5	22.0	21.9	2.3	13.5	
Freq.	43	109	41	105	43	111	

### Table 61. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	2.1	0.9	0.0	0.9	0.0	0.0	8.5	10.9
A little relevant	4.3	12.2	6.4	14.8	4.3	12.2	29.8	22.7
Relevant	27.7	30.4	38.3	33.9	36.2	26.1	27.7	30.0
Very Relevant	66.0	56.5	55.3	50.4	59.6	61.7	34.0	36.4
Freq.	47	115	47	115	47	115	47	110



	Adequ	ate support	Not appropr	iate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	6.4	10.7	4.3	11.7	6.4	0.9	
A little relevant	27.7	28.6	34.8	24.3	14.9	21.7	
Relevant	42.6	32.1	34.8	31.5	31.9	28.7	
Very Relevant	23.4	28.6	26.1	32.4	46.8	48.7	
Freq.	47	112	46	111	47	115	

Table 62. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

The above tables suggest that Primary and Secondary care professionals are similar in the relevancy ratings they give the challenges introduced by VC. The challenges with the biggest difference between the two were a lack of confidence (professional) and access to a safe space (professional).

There were differences between the perceptions of professionals' own challenges and patients' in both Primary and Secondary care, except for access to a safe space (Secondary) and adequate support (Primary). The largest difference between these perceptions, in particular, were for a lack of confidence and access to a device, where these were rated as more relevant for patients.

**Preference for FTF or TC.** Primary and Secondary care were very similar in their relevancy ratings for the preference of FTF or TC for challenges with VC for both themselves and patients. However, there were differences in both care sectors between how they viewed the relevancy of this challenge, whereby this challenge was perceived more relevant for patients than themselves as professionals. These responses are displayed in Figure 39 and 40.

Figure 39. The distribution of relevancy ratings for the preference of FTF or telephone introducing difficulties for VC, for patients and professionals, in Primary care.



Figure 40. The distribution of relevancy ratings for the preference of FTF or telephone introducing difficulties for VC, for patients and professionals, in Secondary care.



**Community care.** For the majority of the challenges, one professional responded not at all relevant, and the other varied between providing relevant and very relevant responses.

**Management and Administration.** The number of responses varied from 1-3. For the majority of challenges, the responses were either 'very relevant' or 'not



relevant' for professionals' difficulties, and 'very relevant' or 'relevant' for patients' difficulties.

#### Statements

Sixteen different statements regarding VC were given to respondents, and they were to state whether they were 'true', 'false', or if they were 'unable to say'. These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Community care and Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary.

**Primary and Secondary care.** The distributions of responses to the statements are displayed in Tables 63-66 for Primary and Secondary care.

	Regularly use VC		Appointment offered as a choice to patient		Dedicated team implementing VC		Clinicians keen to use VC	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	63.8	64.0	18.6	55.6	20.9	69.3	58.7	78.3
False	31.9	28.9	74.4	33.3	72.1	18.4	15.2	8.7
Unable to say	4.3	7.0	7.0	11.1	7.0	12.3	26.1	13.0
Freq.	47	114	43	108	43	114	46	115

Table 63. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

Table 64. The distributions of responses to each of the statements regarding VC in Primary and	
Secondary care.	

	Management keen to use VC		Admin keen to use VC		VC is equivalent to TC		VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	51.4	86.1	38.2	39.4	43.5	42.3	27.7	23.7
False	21.6	0.9	29.4	9.6	43.5	37.8	53.2	62.3
Unable to say	27.0	13.0	32.4	51.0	13.0	19.8	19.1	14.0
Freq.	37	115	34	104	46	111	47	114



### Table 65. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate support available		Received adequate training		Sufficient internet connectivity		Adequate equipment is available	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	54.8	52.2	44.4	80.0	63.0	49.1	71.7	57.9
False	26.2	29.2	44.4	12.2	28.3	35.1	23.9	35.1
Unable to say	19.0	18.6	11.1	7.8	8.7	15.8	4.3	7.0
Freq.	42	113	45	115	46	114	46	114

### Table 66. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate space/rooms are available		Able to log VC in booking systems		Bookings are set up for VC		Concerns about security resolved	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	82.6	31.6	47.8	81.1	28.2	80.2	64.3	48.6
False	15.2	55.3	39.1	7.2	53.8	9.9	11.9	15.0
Unable to say	2.2	13.2	13.0	11.7	17.9	9.9	23.8	36.4
Freq.	46	114	46	111	39	111	42	107

Overall, Primary and Secondary care differed from one another for the responses given to the statements in the tables above. Specifically, Primary care were more positive in their responses for having adequate support available, sufficient internet connectivity, adequate equipment and space/rooms, and that concerns regarding cyber security have been resolved. Also, they were slightly more positive in the responses given for VC being the equivalent to TC or FTF. On the other hand, responses in the two care sectors were similar for the regular use of VC, all three types of colleagues being keen to use VC, and adequate support being available.

The largest difference between Primary and Secondary care was for booking systems being set up for VC, whereby only 28.2% of Primary care professionals stated 'true' for this compared with 80.2% of Secondary care professionals.

**Community care.** Both professionals that responded in Community care stated 'true' for using VC regularly, clinical and Management colleagues being keen, sufficient internet, equipment, space, being able to log VC in the booking systems and booking systems being set up for VC.



**Management and Administration.** The three respondents in Management and Administration reported 'true' for the statements regarding having a team in place for VC implementation, management and administration colleagues being keen to use VC, VC as comparable to FTF, adequate space is available, and that booking systems are set up and able to log VC.

#### Summary of BCUHB

The analysis of the data revealed some interesting findings in terms of professionals' opinions, resulting from asking them to reflect on their previous experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding their use of VC, even when faced with the potential challenges that could be encountered.

The majority of professionals in BCUHB felt that VC should be used where appropriate, and there was only a small proportion of respondents stating that it should 'maybe' be used. This suggests that professionals are open to considering the usage of VC in the future, a very positive response. Interestingly, Primary and Secondary care were very similar in their response to this question. In terms of their usage of VC within their departments, there was a trend towards VC being used more when necessary, rather than routine usage, which means that there could be some improvement in the usage amongst professionals.

Overall, the professionals rated VC positively and beneficial for specific outcomes that VC can have. Secondary care was revealed to be more positive in their responses, although all care sectors expressed positive responses in their opinions of VC. In particular, VC benefits the patient as it allows for a reduction in the need to travel to and from appointments, as well as lowering the risks of viral transmission. On the other hand, for both Primary and Secondary care, lowering levels of the professionals' stress and anxiety and reducing DNA rates were the least beneficial aspects of VC, although a large proportion of professionals still viewed these positively.



Moving on and considering the difficulties with VC, professionals viewed the potential challenges to be more relevant in introducing difficulties for patients than themselves, although respondents' technological difficulties were still highlighted. Overall, these findings highlight the lower rated aspects of VC are typically perceived from a technological perspective. For Primary and Secondary care, similarities emerged in the relevancy of the challenges. The most relevant challenge for both, for instance, was the lack of sufficient internet connectivity (professionals and patients). Similar findings were identified for Management and Administration.

Finally, respondents were given a series of statements to capture an idea of their perceptions of VC. Large proportions of respondents were regularly using VC, their colleagues were keen to make use (including Management and other professionals), and that they had received adequate training to enable them to use VC. On the other hand, there were many respondents that stated they did not have access to sufficient equipment, space to conduct VC, or internet connectivity. These areas also emerged as difficult for Secondary care, specifically, with high numbers of 'false' responses for these statements. This suggests that Secondary care professionals may experience difficulties with VC due to a lack of availability of adequate resources.

In summary, the responses in BCUHB were generally positive, and there were small differences between Primary and Secondary care. These findings suggest that overall, VC is accepted amongst professionals and their opinions of VC allow for the functioning of it within their department or service. This retrospective data implies positive responses from professionals regarding VC usage, although there are challenges faced by professionals and their patients that could introduce barriers in terms of accessing healthcare, such as internet connection and device access.



### Cardiff & Vale University Health Board (CAVUHB)

There was a total of n = 229 responses in CAVUHB. There were n = 66 males, n = 153 females, n = 1 non-binary, and n = 2 prefer not to say, and n = 7 respondents did not state their gender. A total of n = 2 respondents were 18-24 years old, n = 90 25-44 years old, n = 126 45-64 years old, and n = 2 65-80 years old.

#### Should VC be used CAVUHB?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The majority (83.7%) of respondents stated 'yes', and only 1.8% stated 'no'. Overall, this is positive, and suggests that professionals in CAVUHB are keen to using VC where appropriate. These responses are displayed in Figure 41.





#### Use of VC within Department/Service.

Professionals were asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). There were 223 responses in total. The mean response was 50.54 (SD = 30.74), suggesting that professionals in CAVUHB perceive their use of VC to be



between widespread and ad hoc, on average. Nevertheless, based on the high standard deviation, there is a widespread variation across the professionals in CAVUHB.

#### Benefits of VC for CAVUHB

There were thirteen questions included in this survey that asked respondents to rate how beneficial they believed possible advantages of VC were, on a 5-point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 67 and Table 68 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible benefits. These are discussed individually below.

	Saves time, space, and preparation.	Saves travel and parking	Saves travel and parking (patient)	Environmental benefits	Saves taking time off work.	Saves money (e.g., travel, childcare)
Not at all Beneficial	5.9	8.8	0.0	2.7	4.1	2.7
Not Beneficial	7.2	8.8	0.0	4.9	7.7	6.8
Quite Beneficial	21.6	11.7	3.5	13.5	13.6	11.8
Beneficial	29.7	19.0	22.6	28.3	26.8	27.1
Very beneficial	35.6	51.7	73.9	50.7	47.7	51.6
Freq.	222	205	226	223	220	221

Table 67. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

Table 68. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	2.2	0.0	8.4	5.0	5.3	0.9	5.9
Not Beneficial	5.3	2.2	13.6	11.8	13.9	4.1	15.8
Quite Beneficial	26.7	16.7	22.0	30.5	33.5	10.5	30.6
Beneficial	27.6	35.1	22.9	27.7	24.4	29.7	27.9
Very beneficial	38.2	46.1	33.2	25.0	23.0	54.8	19.8
Freq.	225	228	214	220	209	219	222

**Saves time, space, and preparation.** VC was seen to be 'very beneficial' and 'beneficial' by 65.3% of respondents, with an additional, 21.6% of responses reporting it as 'quite beneficial'.



**Saves travel and parking (professional & patient).** VC was seen to very positive for saving travel and parking or the patient than the professional, with 96.5% of responses being for 'very beneficial' and 'beneficial. Saving professional travel and parking was also positive, with 70.7% respondents stating this was 'very beneficial' and 'beneficial' and 'beneficial'.

**Environmental benefits.** 79% of respondents stated that VC was 'very beneficial' or 'beneficial' for the environment, with only 7.6% responding 'not beneficial' or 'not at all beneficial'.

**Saves time off work & saves money.** Once again, these were reported as positive for both the professionals' and patients, from the professional's perspectives. 74.5% of respondents reported VC was 'very beneficial' 'or beneficial' for saving time off work, 78.7% for saving money.

**Improves access to care & improves convenience**. Improving access to care was an advantage seen has 'very beneficial' and 'beneficial' for 65.8% of respondents, and for improving convenience, this was for 'very beneficial' and 'beneficial' for 81.2% of respondents.

**Reducing wait times & reducing likelihood of DNAs.** Overall, 56.1% of professionals believed VC to be 'very beneficial' or 'beneficial' for reducing wait times. The proportion of these responses for reducing the likelihood of DNAs was 52.7%.

**Improves family involvement and support.** This was seen as one of the least beneficial aspects of VC from the professionals' perspective, with only 47.4% responding 'very beneficial' and 'beneficial' to this possible advantage for patients.

**Lowers rates of infection.** Only 5% of professionals responded that this was 'not beneficial' or 'not at all beneficial', and 84.5% were 'very beneficial' and 'beneficial', suggesting that VC was seen as a significant benefit for reducing the rates of infection.

**Lowers stress and anxiety.** This was the least beneficial aspect of VC, with 21.7% of professionals rating this as 'not beneficial' or 'not at all beneficial', however, for 47.7% of respondents, this was reported as 'very beneficial' or 'beneficial'. This suggests that of the potential outcomes of VC, the reduction of stress and anxiety is seen as the least beneficial for the majority of respondents.



#### Challenges of VC for CAVUHB

Eight different challenges were proposed to professionals that could potentially make VC difficult for themselves (Table 69) and for patients (Table 70). They were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

Table 69. The distribution of relevancy ratings	and how difficult the following challenges would
make VC for professionals.	

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	26.3	42.7	17.3	25.1	25.7	25.7	47.2
A little relevant	12.5	13.2	16.9	13.5	19.2	24.8	24.8
Relevant	13.8	9.1	17.3	23.3	29.9	21.8	17.3
Very Relevant	47.3	35.0	48.4	38.1	25.2	27.7	10.7
Freq.	224	220	225	223	214	202	214

### Table 70. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	1.3	2.2	0.4	6.7	11.2	8.8	3.1
A little relevant	12.9	21.0	12.5	25.9	25.1	32.7	19.2
Relevant	29.8	24.6	25.4	21.4	33.5	26.7	32.1
Very Relevant	56.0	52.2	61.6	46.0	30.2	31.8	45.5
Freq.	225	224	224	224	215	217	224

The most relevant challenge introduced by VC for professionals was poor internet connection, with 48.4% of respondents stating this was 'very relevant'. The least relevant, on the other hand, was having a lack of confidence. Considering the difficulties for patients, the most relevant was having poor internet connection (61.6% 'very relevant'), and the least relevant was having an adequate support system from family and friends.

Considering the comparisons between professionals and patients' difficulties with VC, there was a notable difference between the relevancy ratings professionals gave having a lack of confidence for themselves and for their patients (Figure 42). In addition, there was also a difference between these



ratings for the cost or having no access to internet, whereby this was more relevant for patients than themselves (Figure 43).



Figure 42. The distribution of relevancy ratings for challenges introduced by having a lack of confidence, for professionals and patients.





**Preference of FTF or TC.** In addition to the above challenges that may introduce difficulties, professionals were asked whether a preference for FTF or TC would impact VC for both professionals and for patients. This challenge was not as



relevant for professionals as it was for patients. However, the most common response for professionals' difficulties was 'a little relevant', suggesting this challenge still introduced difficulties for respondents (Figure 44).





#### Statements of VC Use in CAVUHB

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 71 and Table 72.

#### Table 71. The distributions of responses to each of the statements regarding VC.

	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinicians keen to use VC	Management keen to use VC	Admin keen to use VC	VC is equivalent to TC	VC is equivalent to FTF
True	81.1	43.8	46.0	71.5	74.9	39.0	46.4	25.9
False	15.4	44.2	31.3	11.4	5.8	17.4	37.9	54.8
Unable to say	3.5	12.1	22.8	17.1	19.3	43.7	15.6	19.3
Freq.	227	224	224	228	223	213	224	228



	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security have been resolved
True	40.0	68.4	53.8	52.9	50.0	66.1	52.3	45.2
False	32.0	20.9	29.8	38.3	37.5	17.2	29.1	17.2
Unable to say	28.0	10.7	16.4	8.8	12.5	16.7	18.6	37.6
Freq.	225	225	225	227	224	221	220	221

#### Table 72. The distributions of responses to each of the statements regarding VC.

**Regularly use VC.** A vast majority of respondents in CAVUHB (81.1%) stated they are regularly using VC, with only 15.4% stating that they were not.

**Appointment offered as a choice to patient.** An almost equal proportion of respondents stated 'true' and 'false' to this statement, suggesting that almost half of professionals offer VC as a choice to patients (43.8%), and half do not (44.2%).

**Dedicated team implementing VC.** Almost half (46%) of the respondents stated that this statement was 'true', and that they have a dedicated team for implementing VC. However, 22.8% stated they were unable to say, suggesting these respondents were unsure of this statement.

**Colleagues keen to use VC.** Clinical colleagues and Management seemed to be similar in their keenness to use VC, with 71.5% stating 'true' for clinical colleagues and 74.9% for Management. On the other hand, only 39% stated 'true' for Administration colleagues, and the majority (43.7%) of the responses here were for 'unable to say'.

VC is equivalent to TC or FTF. For TC being the equivalent to VC, almost half (46.4%) of the responses were 'true', however, for FTF, over half (54.8%) were 'false'. This suggests that the majority of professionals view VC as being the equivalent to TC, but not FTF.

Adequate support, training, internet, equipment, and rooms/space available. For the majority of these statements, the responses were positive. The statement with the least number of 'true' responses was for having adequate support available (40%). The most positive statement, on the other hand, was having received adequate training (68.4%).



Able to log VC & booking systems are set up for VC. Over half of respondents reported 'true' to both of these statements, with 66.1% reporting to be able to log VC in booking systems, and 52.3% stating that booking systems are set up for VC.

**Concerns about cyber security.** Finally, the majority (45.2%) of responses for this statement were once again 'true', while 37.6% were for 'unable to say', perhaps suggesting that these respondents had not encountered these issues or was uncertain of this statement.

### Care Sector Findings in CAVUHB

This section will consider the findings from Primary, Secondary, and Community care, as well as responses from Management and Administration. There were n = 33 responses from Primary care, n = 167 in Secondary, n = 1 in Community, and n = 6 for Management and Administration. N = 22 respondents stated "Other", but did not report their specialty or profession, or did not respond at all. Thus, these were excluded.

**Respondent demographics.** Table 73 displays the demographics of respondents in each care sector in CAVUHB. The one respondent in Community care was male

	Primary		Secondo	ary	Manager	nent/Admin
Gender	Freq.	%	Freq.	%	Freq.	%
Male	15	45.5	44	27.0	1	20.0
Female	18	54.5	117	71.8	4	80.0
Non-Binary	0	0	1	0.6	0	0.0
PNTS	0	0	1	0.6	0	0.0
Freq.	33		163		5	
Age		•				•
18-24	0	0.0	2	1.2	0	0.0
25-44	8	24.2	71	43.8	1	20.0
45-64	25	75.8	87	53.7	4	80.0
65-80	0	0.0	2	1.2	0	0.0
Over 80	0	0.0	0	0.0	0	0.0
Freq.	33	•	162		5	•

Table 72 diaplay a the	down own which of rou	an an al anta in a a ala	care sector in CAVUHB.
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#### Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.



The response to this question for each care sector, as well as Management and Administration is displayed in Figure 45. Primary and Secondary care were similar in their responses to this question, with 78.8% stating 'yes' in Primary and 84.8% in Secondary care. However, there were no responses for 'no' in Primary, but 1.8% of the responses were for 'no' in Secondary care , although this may be due to the differences in group sizes, as there was a larger response rate in Secondary care (n = 165) than Primary care (n = 33). There were no responses for 'no' amongst the Management and Administration respondents, and the one individual in Community care responded 'yes'.





#### Use of VC within Department/Service.

The responses to where professionals rated their service or department on the scale from 0 (ad hoc) to 100 (widespread routine practice) in each care sector are displayed in Figure 46. It is important to note that there was only one respondent in Community care and five in Management and Administration. The responses suggest that Secondary care (n = 164) perceive their department or service to be more widespread, with a mean score of 56.68 (SD = 27.91), compared with Primary care (n = 31), giving a mean rating of 28.90 (SD = 28.39). Nevertheless, based on the standard deviation, the widespread variation is clear across both sectors.



Figure 46. The mean scores of the question regarding the usage of VC within the professionals' department/service in each care sector.



#### Benefits

The responses to the thirteen possible benefits of VC are displayed in Tables 8-11 for both Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Community care and Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary care.

**Primary and Secondary care.** The responses for Primary and Secondary care are displayed in Tables 74-77. Overall, Secondary care were more positive in their responses than Primary care. For both care sectors, saving travel and parking for the patient was seen as the most beneficial aspect of VC, with the highest proportion of responses for 'very beneficial', and no responses for 'not beneficial' or 'not at all beneficial'. For Primary care alone, the least beneficial aspects of VC were improving family involvement and reducing stress and anxiety. The least beneficial aspect for Secondary care was also lowering stress and anxiety.



### Table 74. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

		ne, space, eparation.		ravel and Irking	Saves travel and parking (patient)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	12.5	4.3	6.5	9.4	0.0	0.0
Not Beneficial	12.5	6.8	22.6	6.7	0.0	0.0
Quite Beneficial	28.1	20.4	12.9	11.4	12.1	1.2
Beneficial	21.9	32.1	22.6	17.4	39.4	19.9
Very beneficial	25.0	36.4	35.5	55.0	48.5	78.9
Freq.	32	162	31	149	33	166

# Table 75. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Enviro	onmental	Saves tal	king time off	Saves m	Saves money (e.g.,		
	be	benefits		ork.	travel, childcare)			
	Primary	Secondary	Primary	Secondary	Primary	Secondary		
Not at all Beneficial	3.1	1.8	3.0	3.1	0.0	2.5		
Not Beneficial	9.4	4.3	12.1	7.5	18.2	4.9		
Quite Beneficial	25.0	11.7	30.3	10.1	24.2	9.9		
Beneficial	28.1	27.0	27.3	27.7	30.3	25.9		
Very beneficial	34.4	55.2	27.3	51.6	27.3	56.8		
Freq.	32	163	33	159	33	162		

## Table 76. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	•	Improves access to care		proves enience	Reduces wait times	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	6.3	1.8	0.0	0.0	10.0	8.2
Not Beneficial	9.4	4.3	6.1	1.2	26.7	10.8
Quite Beneficial	31.3	25.6	33.3	15.1	23.3	22.8
Beneficial	34.4	25.6	42.4	32.5	26.7	22.2
Very beneficial	18.8	42.7	18.2	51.2	13.3	36.1
Freq.	32	164	33	166	30	158



Table 77. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Reduces likelihood of DNAs		Improves family involvement and support		Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	6.9	4.3	3.3	6.0	0.0	1.3	6.5	4.9
Not Beneficial	13.8	11.7	26.7	11.3	9.4	3.1	22.6	14.1
Quite Beneficial	44.8	28.2	46.7	30.5	12.5	9.4	41.9	30.1
Beneficial	24.1	28.8	13.3	26.5	43.8	27.5	19.4	30.1
Very beneficial	10.3	27.0	10.0	25.8	34.4	58.8	9.7	20.9
Freq.	29	163	30	151	32	160	31	163

**Community care.** The one respondent in Community care responded 'very beneficial' to most of the aspects of VC, except for access to care ('beneficial'), improving family involvement ('quite beneficial'), and reducing stress and anxiety ('quite beneficial').

**Management and Administration.** There were only five respondents in this sector. The majority of responses were positive, but the only aspects of VC rated 'not beneficial' or 'not at all beneficial' by more than one respondent were environmental benefits, saving money, reducing wait times and DNAs, increasing family support and involvement, and reducing stress and anxiety.

#### Challenges

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Community care and Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary care.

**Primary and Secondary.** Table 78-81 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (78 and 79) and patients (80 and 81), in Primary and Secondary care.

## Table 78. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary Secondary		Primary Secondary		Primary Secondary	
Not relevant	24.2	24.2	34.4	42.0	18.2	16.4	28.1	20.1
A little relevant	12.1	12.7	18.8	14.2	12.1	15.8	3.1	14.6
Relevant	21.2	12.7	3.1	9.3	12.1	18.8	37.5	23.2
Very Relevant	42.4	50.3	43.8	34.6	57.6	49.1	31.3	42.1
Freq.	33	165	32	162	33	165	32	164

## Table 79. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	No service support		Not appropr	iate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	22.6	22.0	15.6	27.2	35.5	47.5	
A little relevant	22.6	20.1	15.6	28.6	22.6	25.3	
Relevant	32.3	31.4	34.4	16.3	25.8	17.1	
Very Relevant	22.6	26.4	34.4	27.9	16.1	10.1	
Freq.	31	159	32	147	31	158	

### Table 80. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe	space
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	0.0	1.8	0.0	2.4	0.0	0.6	3.1	7.8
A little relevant	3.1	12.7	15.6	20.0	3.2	12.0	18.8	24.1
Relevant	18.8	30.7	18.8	26.1	19.4	26.5	25.0	22.3
Very Relevant	78.1	54.8	65.6	51.5	77.4	60.8	53.1	45.8
Freq.	32	166	32	165	31	166	32	166



	Adeque	ate support	Not appropri	ate or suitable	Lack of	confidence
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	6.7	13.9	0.0	11.3	0.0	3.6
A little relevant	13.3	25.3	31.3	34.0	6.3	22.4
Relevant	36.7	32.3	25.0	23.9	37.5	31.5
Very Relevant	43.3	28.5	43.8	30.8	56.3	42.4
Freq.	30	158	32	159	32	165

Table 81. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

Overall, Primary care rated the challenges as more relevant than Secondary care, except for professionals' access to a device and safe space, and having no service support. The most relevant challenges for professionals in Primary care was having poor internet connection, and the least relevant was having a lack of confidence. For Secondary care professionals, the most relevant challenge was having access to a device, whereas the least relevant was also having a lack of confidence. In terms of difficulties for their patients, the most relevant was having adequate support from family and friends. For Secondary care patients, the most relevant was having adequate support from family and friends. For Secondary care patients, the most relevant was having poor internet connection, and the least relevant difference between professionals' perceptions of their own and patients' difficulties introduced by VC was for having a lack of confidence with VC, displayed in Figure 47 (Primary care) and Figure 48 (Secondary care).



Figure 47. The distribution of relevancy ratings for having a lack of confidence, for patients and professionals, in Primary care.







**Preference for FTF or TC.** In addition to the challenges above, professionals were also asked if a preference for FTF would introduce difficulties with VC for themselves and their patients. Firstly, there seemed to be differences between Primary and Secondary care for the relevancy ratings they gave this challenge for themselves and for their patients. Secondly, there were also differences between the ratings they gave themselves and the ratings they gave their patients, with this challenge causing more difficulties for their patients (Figure 49).



Figure 49. The distribution of relevancy ratings for having a preference for FTF of telephone, for Primary and Secondary, Professionals and Patients.



**Community care.** For all of professionals' challenges, the one individual rated these as either 'not relevant' or 'a little relevant'. For patients' challenges, these were rated as 'relevant' or 'very relevant', except for having a safe space and adequate support from family and friends ('a little relevant').

**Management and Administration.** Overall, the four respondents in this sector were mixed in their relevancy ratings for professionals' challenges, such that half rated them as 'relevant' and half 'not relevant' or 'a little relevant'. For patients' challenges, they were rated as more relevant than the professionals' challenges.

#### Statements

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Community care and Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary care.

**Primary and Secondary care.** The distributions of responses to the statements are displayed in Tables 82-85 for Primary and Secondary care.

	Regular use VC		Appointment offered as a choice to patient		Dedicated team implementing VC		Clinicians keen to use VC	
	Primary Secondary		Primary	Secondary	Primary	Secondary	Primary	Secondary
True	57.6	87.3	25.0	47.6	28.1	50.6	63.6	74.1
False	33.3	9.6	68.8	39.0	62.5	21.3	15.2	8.4
Unable to say	9.1	3.0	6.3	13.4	9.4	28.0	21.2	17.5
Freq.	33	166	32	164	32	164	33	166

Table 82. The distributions of responses to each of the statements regarding VC in Prime	ary and
Secondary care.	



### Table 83. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Management keen to use VC		Admin keen to use VC		VC is equivalent to TC		VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	66.7	78.7	33.3	39.9	45.5	45.1	18.2	28.3
False	10.0	3.7	30.0	12.7	39.4	38.9	63.6	53.0
Unable to say	23.3	17.7	36.7	47.5	15.2	16.0	18.2	18.7
Freq.	30	164	30	158	33	162	33	166

### Table 84. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate support available		Received adequate training		Sufficient internet connectivity		Adequate equipment available	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	53.1	36.0	62.5	70.3	60.6	50.0	72.7	49.1
False	15.6	34.1	34.4	17.6	27.3	31.1	24.2	40.6
Unable to say	31.3	29.9	3.1	12.1	12.1	18.9	3.0	10.3
Freq.	32	164	32	165	33	164	33	165

# Table 85. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate space/rooms are available		Able to log VC in booking systems			s are set up or VC	Concerns about security have been resolved		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
True	84.8	38.9	28.1	75.5	20.7	61.1	56.3	42.5	
False	15.2	45.1	53.1	9.2	62.1	19.1	15.6	16.3	
Unable to say	0.0	16.0	18.8	15.3	17.2	19.8	28.1	41.3	
Freq.	33	162	32	163	29	162	32	160	

Overall, Secondary care were relatively more positive in their responses than Primary care, except for the statements regarding having adequate support available, sufficient internet connectivity, adequate equipment and space/rooms available, and concerns about cyber security being resolved.



For these statements in particular, Primary care professionals were more positive, having a higher proportion of 'true' responses. The largest difference between the two care sectors for the number of 'true' responses given was for being able to log VC in the booking systems. For this statement, 53.1% of Primary professionals stated 'false', compared with only 9.2% of Secondary care professionals. The most similar statement was VC being the equivalent to telephone, were 45.5% of Primary professionals and 45.1% of Secondary care professionals stated 'true'.

**Community care.** The one respondent in Community care stated 'true' to each statement, except for VC being the equivalent to FTF, where the response was 'false'.

**Management and Administration.** The majority of the responses for each statement was 'true', except for offering VC to the patient, booking systems being set up for VC, that VC is the equivalent to FTF and to TC, and that adequate equipment and training is available. For these statements, the majority of responses were either 'false' or 'unable to say'.

#### Summary of CAVUHB

The analysis of the data revealed some interesting findings in terms of professionals' opinions, resulting from asking them to reflect on their previous experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding their use of VC, even when faced the potential challenges.

The majority of professionals in CAVUHB felt that VC should be used where appropriate, with some professionals exhibiting a level of uncertainty regarding this idea. However, there was only a small proportion of professionals that believed it should not be used entirely. For the care sectors in particular, Primary care demonstrated this uncertainty, although responses were overall positive in both Primary and Secondary care. Additionally, when asked to consider their department/service's usage of VC, the respondents identified this to be almost halfway between routine use and only using it when necessary. Primary care identified this to be lower, however, with their usage



being more towards "ad hoc", suggesting that usage can be improved amongst these professionals.

Overall, respondents in CAVUHB rated VC beneficial for the potential outcomes. Secondary care was revealed to be more positive in their responses for the majority of the benefits, however, all care sectors still exhibited positive opinions regarding VC. In particular, VC was seen to benefit the patient, in that it allows for a reduction in the time taken to travel to appointments, as well as reducing the risks of viral transmission. On the other hand, although receiving positive responses on the whole, VC was not as beneficial for other aspects, such as reducing DNA rates.

Moving on and considering the difficulties with VC, professionals viewed the potential challenges to be more relevant in introducing difficulties for patients than themselves, such as lacking confidence, although respondents' technological difficulties were still highlighted. Overall, these findings highlight the lower rated aspects of VC are typically perceived from a technological perspective. For Primary and Secondary care, specific differences emerged, in that the most relevant challenges differed between the professionals. Primary care professionals rated accessing devices as more relevant, whereas this was poor internet connection for Secondary care. However, what this does imply is that technological limitations are relevant for patients within both care sectors, perhaps introducing the most challenges with VC. The findings are similar in Community, as well as Management and Administration.

Finally, respondents were given a series of statements to capture an idea of their perceptions of VC. It was revealed that large proportions of respondents were regularly using VC, their colleagues were keen to make use (including Management and other professionals), and that they had received adequate training to enable them to use VC. On the other hand, professionals were not happy to say that VC was the equivalent to FTF, which suggests that VC does



not fully replace or fulfil the needs of professionals as FTF does. Furthermore, there were many respondents that stated they did not have access to sufficient equipment, space to conduct VC, or internet connectivity. These areas specifically emerged as difficult for Secondary care, with high numbers of 'false' responses for these statements. This suggests that Secondary care professionals may experience difficulties with VC due to a lack of availability of adequate resources. Community care and Management and Administration also responded positively, overall.

In summary, the responses in CAVUHB were generally positive, and there were small differences between Primary and Secondary care, although Secondary care professionals seemed slightly more positive than Primary. These findings suggest that VC is accepted amongst professionals, allowing the use of VC to continue within their departments or services. Regardless of the challenges faced, such as barriers to accessing healthcare in specific circumstances, VC is implied to be positively perceived by these professionals.



### Cwm Taf Morgannwg University Health Board (CTMUHB)

There was a total of n = 85 responses in CTMUHB. There were n = 31 males, n = 50 females, n = 3 prefer not to say, and n = 2 did not state their gender. In total, n = 1 respondent was 18-24 years old, n = 35 were 25-44 years old, n = 46 were 45-64 years old, and n = 1 was 65-80 years old.

#### Should VC be used in CTMUHB?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The majority of responses were 'yes' (79.8%), and only 2.4% stated 'no'. The remaining responses (17.9%) reported 'maybe', suggesting that these professionals may consider using VC as and when appropriate. These responses are displayed in Figure 50.





### Use of VC within Department/Service.

Professionals were also asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). There were 84 responses for this question, and the mean responses was 40.50 (SD = 37.74), suggesting that professionals perceive their use of VC within their department or service to be slightly more ad hoc than widespread.



Nevertheless, based on the high standard deviation, there is a widespread variation across professionals in CTMUHB.

#### Benefits of VC in CMTUHB

There were thirteen questions included in this survey that asked respondents to rate how beneficial they believed possible advantages of VC were, on a 5-point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 86 and Table 87 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible advantages. These are discussed individually below.

Saves time, Saves travel **Environmental** Saves Saves Saves space, and travel and benefits taking money (e.g and parking preparation. time off parking (patient) travel. work childcare) Not at all 7.4 15.5 1.2 5.1 2.5 3.8 **Beneficial** Not Beneficial 16.0 16.9 1.2 7.6 3.8 6.3 Quite Beneficial 9.5 19.0 17.7 23.5 11.3 22.8 Beneficial 28.4 25.3 32.9 38.0 14.1 26.2 Very beneficial 24.7 42.3 61.9 39.2 41.8 34.2 81 71 84 79 79 79 Freq.

Table 86. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

### Table 87. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	6.3	0.0	16.5	11.3	12.3	1.2	7.9
Not Beneficial	6.3	4.9	16.5	15.0	21.0	4.9	18.4
Quite Beneficial	32.5	24.4	25.3	33.8	33.3	14.8	40.8
	22.5	32.9	19.0	17.5	19.8	30.9	19.7
Beneficial Very beneficial	32.5	37.8	22.8	22.5	13.6	48.1	13.2
Freq.	80	82	79	80	81	81	76



**Saves time, space, and preparation.** A total of 53.1% of respondents stated that VC was 'very beneficial' or 'beneficial' for saving time, space and preparation, with an additional 23.5% reporting it as 'quite beneficial'.

**Saves travel and parking (professional & patient).** Saving travel and parking for the patient was seen as the most beneficial aspect of VC. It was reported as 'very beneficial' and 'beneficial' for patients by 88.1% of respondents, and for professionals by 56.4% of respondents.

**Environmental benefits.** VC was seen as being 'very beneficial' or 'beneficial' by 64.5% of the respondents for the environment, with an additional 22.8% reporting 'quite beneficial'.

**Saves time off work & saves money.** VC was also rated as 'very beneficial' and 'beneficial' by 74.7% of respondents for saving taking time off work, as well as saving money by 72.2% of respondents.

**Improves access to care & improve convenience.** There were no responses for VC being 'not at all beneficial' for improving convenience, and only 4.9% of responses were for 'not beneficial', suggesting that VC was seen as positive for improving convenience, 70.7% of respondents stated it as 'very beneficial' and 'beneficial'. In terms of improving access to care, 55% of respondents stated it as 'very beneficial' and 'beneficial'.

**Reduces wait times and reduces likelihood of DNAs.** These two benefits of VC were rated less beneficial than the others, with only 41.8% (wait times) and 40% (likelihood of DNAs) of responses for 'very beneficial' and 'beneficial'. Also, 33% reported that VC was 'not beneficial' or 'not at all beneficial' for reducing wait times, and 26.3% for reducing the likelihood of DNAs.

**Improves family involvement and support.** 33.4% of responses reported that VC was 'very beneficial' and 'beneficial' for this aspect, one of the lowest ratings for CMTUHB. However, an additional 33.3% reported it to be 'quite beneficial'.

**Lowers rates of infection.** This was seen as the one of the most beneficial aspects of VC by professionals, with 79% stating that it was 'very beneficial' or 'beneficial' for reducing infection rates.

**Lowers stress and anxiety.** Reduction of stress and anxiety was perceived as 'very beneficial' and 'beneficial' by 32.9% of respondents. This is the lowest



rated aspect, suggesting that professionals perceive VC to not be as beneficial for lowering stress and anxiety levels for themselves and patients.

#### Challenges of VC in CTMUHB

Eight different challenges were proposed to professionals that could potentially make VC difficult for themselves (Table 89) and for patients (Table 90). Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

Table 89. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals.

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	24.7	36.5	15.9	28.0	24.4	19.7	39.2
A little relevant	9.9	8.1	8.5	11.0	15.4	21.1	27.8
Relevant	17.3	16.2	14.6	18.3	26.9	27.6	19.0
Very Relevant	48.1	39.2	61.0	42.7	33.3	31.6	13.9
Freq.	81	74	82	82	78	76	79

Table 90. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	1.2	1.2	2.4	10.6	11.9	8.6	1.2
A little relevant	4.7	5.9	2.4	20.0	23.8	24.7	9.6
Relevant	17.6	20.0	19.0	30.6	31.0	29.6	32.5
Very Relevant	76.5	72.9	76.2	38.8	33.0	37.0	56.6
Freq.	85	85	84	85	84	81	83

For professionals, the most relevant challenge having poor internet connectivity, with 61% of respondents rating this as 'very relevant'. The least relevant, on the other hand, was having a lack of confidence, whereby 39.2% reported that this was 'not relevant'. From the patients' perspective, the most relevant challenge was having access to a device, whereas the least relevant was having adequate support available from family and friends.



Considering the differences between professionals' and patients' challenges, the largest difference was for a lack of confidence, whereby patients were perceived to encounter more difficulties because of this. The smallest difference was for receiving adequate support. Other notable differences were for access to a device, and access or the cost of internet, with these being more relevant for patients. These responses are displayed in Figure 51-53.



Figure 51. The distribution of relevancy ratings for challenges introduced by having access to a device, for professionals and patients

Figure 52. The distribution of relevancy ratings for challenges introduced by having access to internet, for professionals and patients.







**Preference for FTF or TC**. Overall, professionals stated that the preference for FTF or TC was more relevant for causing difficulties for patients than themselves. However, this was still reported as relevant for some professionals, with 27.8% reporting this was 'very relevant', compared with 50% for patients' challenges. These responses are displayed in Figure 54.







#### Statements of VC Use in CTMUHB

10.00

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 91 and Table 92.

	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinicians keen to use VC	Management keen to use VC	Admin keen to use VC	VC is equivalent to TC	VC is equivalent to FTF
True	73.5	36.3	40.2	63.5	80.3	41.6	41.7	20.5
False	20.5	52.5	41.5	10.6	7.9	19.5	41.7	65.1
Unable to say	6.0	11.3	18.3	25.9	11.8	39.0	16.7	14.5
Freq.	83	80	82	85	76	77	84	83

#### Table 92. The distributions of responses to each of the statements regarding VC.

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security resolved
True	35.3	59.5	47.6	51.2	57.1	57.0	39.7	41.0
False	31.8	26.2	28.6	40.5	29.8	22.8	28.2	15.4
Unable	32.9	14.3	23.8	8.3	13.1	20.3	32.1	43.6
to say								
Freq.	85	84	84	84	84	79	78	78

**Regularly use VC.** The majority of respondents stated 'true' to using VC regularly (72.5%), with 20.5% stating 'false', and 6% 'unable to say'. This suggests that the use of VC is being used more regularly by the most professionals in CTMUHB than not.

**Appointment offered as a choice.** Interestingly, more than half (52.5%) of responses for this statement were 'false', and an additional 11.3% reporting to be uncertain, suggesting that VC is not always offered as a choice to the patient.

**Dedicated team implementing VC.** The responses for 'true' and 'false' for this statement were very similar, with 40.2% for 'true' and 41.5% for 'false', perhaps suggesting that an equal number of respondents know they have or have not got a team or individual that is dedicated to implementing VC.



**Colleagues keen to use VC.** Management colleagues seemed to be the keenest to implement VC, with 80.3% of responses for 'true', followed by clinical colleagues (63.5%), and then Administration (41.6%). However, for the statement regarding Administration colleagues, the majority of responses were for 'unable to say', suggesting that professionals were unsure of whether these colleagues were keen to use VC.

VC is equivalent to TC or FTF. The most positive response was for the statement regarding VC being the equivalent to TC, with 41.7% stating 'true', compared with only 20.5% for FTF. This suggests that professionals view TC to be more equivalent to VC than VC to FTF.

Adequate support, training, internet connectivity, equipment, and space/rooms. The responses were relatively positive for these statements. For having adequate support available, the highest proportion of responses was for 'true', followed closely by 'unable to say', suggesting that professionals were unsure whether adequate support was available. The most positive statement was having received adequate training, with 59.5% of responses for 'true'.

Able to log VC and booking set up for VC. The majority of responses for both of these statements were 'true' (log VC 57%, book VC 39.7%), however there was a high proportion of responses for 'unable to say', once again suggesting that professionals were unsure whether these are available for VC.

**Concerns about security have been resolved**. Finally, 41% of professionals responded 'true' to this statement, however, the majority responded 'unable to say' (43.6%), perhaps suggesting that these had not encountered this issue.

#### Care Sector Findings in CTMUHB

There were n = 26 responses from Primary care, n = 51 in Secondary, and n = 2 for Management and Administration. There were no responses for Community, and n = 6 respondents stated 'other', but did not report their specialty or profession, or did not respond at all. Thus, these were excluded.

**Respondent demographics.** Table 93 displays the demographics of respondents in each care sector in CTMUHB. The one individual in Community care was female and aged 25-44.

Table 93 displays the demographics of res	pondents in each care	ector in CTMUHB.
	-	

Primary		Secondary	Management/Admin	
	- /	· · · · · · · · · · · · · · · · · · ·		



Gender	Freq.	%	Freq.	%	Freq.	%
Male	13	50.0	14	28.0	1	50.0
Female	13	50.0	34	68.0	1	50.0
Non-Binary	0	0.0	0	0.0	0	0
PNTS	0	0.0	2	4.0	0	0
Freq.	26		50		2	
Age						
18-24	0	0.0	1	2.0	0	0.0
25-44	10	38.5	22	44.9	1	50.0
45-64	16	61.5	26	53.1	1	50.0
65-80	0	0.0	0	0.0	0	0.0
Over 80	0	0.0	0	0.0	0	0.0
Freq.	26 49		49 2			

#### Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required).". They were given the options, 'yes', 'no', and 'maybe'.

The response to this question for Primary and Secondary care are displayed in Figure 55. The two respondents in Management and Administration stated 'yes'. Comparing Primary and Secondary, they were very similar in their responses, however 2% of respondents stated 'no' in Secondary care, compared with none in Primary care. In general, this suggests that Primary and Secondary care both believe that VC should be used where appropriate by the majority of professionals.



Figure 55. The distributions of responses to should VC be used in Primary (n = 26) and Secondary care (n = 51).


#### Use of VC within Department/Service.

The responses to where professionals rated their service or department on the scale from 0 (ad hoc) to 100 (widespread routine practice) in Primary and Secondary care are displayed in Figure 56. The two respondents in Management and Administration gave scores of 14 and 50, thus a mean of 32.0 (SD = 25.46). Considering Primary and Secondary care, the mean response for Secondary care (M = 45.47, SD = 30.65) was higher on the scale than Primary care (M = 27.69, SD = 29.08). Nevertheless, based on the standard deviations, there is still a widespread variation across both care sectors.





#### Benefits

The responses to the thirteen possible benefits of VC are displayed in Tables 8-11 for both Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Management and Administration are discussed below, as there were only two respondents.

**Primary and Secondary care.** The responses for Primary and Secondary care are displayed in Tables 94-97. In general, Secondary care was more positive than Primary care, with more responses for 'very beneficial', except for reducing wait times and reducing the likelihood of DNAs, where Primary had a higher proportion of responses for 'very beneficial'. The most beneficial aspect of VC for both care sectors was saving travel and parking for the patient, and the least beneficial was lowering stress and anxiety for Secondary care and improving family involvement and support for Primary care.

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### Table 94. The distributions (%) of responses to how beneficial each possible advantage is from the Primary and Secondary care professionals' perspectives.

		e, space, and aration.		travel and arking		travel and g (patient)
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	7.7	8.3	13.0	19.0	0.0	0.0
Not Beneficial	15.4	18.8	21.7	14.3	3.8	2.0
Quite Beneficial	26.9	18.8	17.4	9.5	19.2	3.9
Beneficial	30.8	27.1	8.7	14.3	19.2	27.5
Very beneficial	19.2	27.1	39.1	42.9	57.7	66.7
Freq.	26	48	23	42	26	51

### Table 95. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

		nmental nefits		ing time off ork.		Saves money (e.g., travel, childcare)		
	Primary	Secondary	Primary	Secondary	Primary	Secondary		
Not at all Beneficial	7.7	4.3	4.0	2.1	11.5	0.0		
Not Beneficial	2.8	10.6	4.0	4.3	11.5	4.3		
Quite Beneficial	15.4	27.7	24.0	17.0	26.9	14.9		
Beneficial	34.6	19.1	28.0	31.9	23.1	42.6		
Very beneficial	38.5	38.3	40.0	44.7	26.9	38.3		
Freq.	26	47	25	47	26	47		

### Table 96. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Improves access to care		Improves	convenience	Reduce	Reduces wait times		
	Primary	Secondary	Primary	Secondary	Primary	Secondary		
Not at all Beneficial	12.0	4.2	0.0	0.0	12.5	20.8		
Not Beneficial	0.0	8.3	7.7	4.1	20.8	14.6		
Quite Beneficial	28.0	33.3	19.2	24.5	25.0	22.9		
Beneficial	36.0	16.7	34.6	32.7	16.7	18.8		
Very beneficial	24.0	37.5	38.5	38.8	25.0	22.9		
Freq.	25	48	26	49	24	48		



### Table 97. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Reduces likelihood of DNAs		Improves family involvement and support		Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	9.1	13.7	11.5	14.3	0.0	2.1	4.2	11.1
Not Beneficial	22.7	9.8	19.2	24.5	7.7	4.2	25.0	15.6
Quite Beneficial	22.7	41.2	46.2	22.4	19.2	12.5	37.5	40.0
Beneficial	18.2	15.7	11.5	22.4	34.6	27.1	20.8	17.8
Very beneficial	27.3	19.6	11.5	16.3	38.5	54.2	12.5	15.6
Freq.	22	51	26	49	26	48	24	45

**Management and Administration.** There were only two responses in the sector. All aspects of VC were rated as either 'quite beneficial', 'beneficial', or 'very beneficial' by the respondents.

#### Challenges

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Management and Administration will be considered below, as there were only two respondents.

**Primary and Secondary.** Table 98-101 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (98 and 99) and patients (100 and 101), in Primary and Secondary care.

	Access	to a device	No / Co	st of internet	nternet Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	50.0	14.3	56.5	29.5	30.4	9.8	50.0	16.0
A little relevant	8.3	8.2	4.3	9.1	13.0	7.8	8.3	14.0
Relevant	12.5	18.4	8.7	13.6	4.3	17.6	0.0	22.0
Very Relevant	29.2	59.2	30.4	47.7	52.2	64.7	41.7	48.0
Freq.	24	49	23	44	23	51	24	50

Table 98. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

### Table 99. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	No serv	ice support	Not appropr	iate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	52.2	10.2	26.1	15.2	58.3	27.1	
A little relevant	8.7	18.4	17.4	26.1	29.2	25.0	
Relevant	21.7	26.5	30.4	28.3	8.3	27.1	
Very Relevant	17.4	44.9	26.1	30.4	4.2	20.8	
Freq.	23	49	23	46	24	48	

### Table 100. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Access	to a device	No / Co	st of internet	Poor internet connection		Safe	Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	0.0	0.0	0.0	0.0	0.0	2.0	11.5	5.9	
A little relevant	4.0	3.8	12.0	3.8	8.0	0.0	26.9	15.7	
Relevant	16.0	17.3	12.0	21.2	24.0	13.7	38.5	27.5	
Very Relevant	80.0	78.8	76.0	75.0	68.0	84.3	23.1	51.0	
Freq.	25	52	25	52	25	51	26	51	

# Table 101. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care. Adequate support

	Adequate :	support	Not appropri	ate or suitable	Lack of con	fidence
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	16.0	7.8	8.0	6.1	0.0	0.0
A little relevant	36.0	17.6	28.0	26.5	12.0	7.8
Relevant	24.0	35.3	36.0	22.4	32.0	33.3
Very Relevant	24.0	39.2	28.0	44.9	56.0	58.8
Freq.	25	51	25	49	25	51

Overall, respondents were more positive in their relevancy ratings for themselves than their perceptions of patient difficulties. Some challenges were similar for both, however, such as access to a safe space for Secondary care professionals, a lack of support from service or friends and family, and VC not being suitable or appropriate. The biggest difference in these perceptions was for having a lack of confidence, whereby professionals rated this as more relevant for patients than themselves.



For professionals' own challenges, the biggest difference between Primary and Secondary care was accessing a device, where these professionals rated this as more relevant than Primary care professionals. The most similar challenge for both care sectors, on the other hand, was not being suitable or appropriate for the patient, where professionals rated this as not very relevant compared with the other challenges.

For patients' challenges, the biggest difference was for having access to a safe space, Secondary care professionals rated this as more relevant than Primary care professionals. Finally, the smallest difference was for access to a device, both care sector professionals viewed this as 'very relevant', with approximately 80% in each care sector rating this as 'very relevant'.

**Preference for FTF.** In addition to the challenges above, professionals were also asked if a preference for FTF would introduce difficulties with VC for themselves and their patients. The two care sectors were relatively similar in their responses, but Primary care seemed to rate this challenge as more relevant for themselves (33.3% 'very relevant') and their patients (56% 'very relevant') compared with Secondary care (25.5% 'very relevant' for themselves, and 49% for their patients). However, both rated the challenge as more relevant for their patients than themselves. These responses are displayed in Figure 57.



Figure 57. The distribution of relevancy ratings for the preference of FTF or telephone introducing difficulties for VC, for patients and professionals, in Primary and Secondary care.



**Management and Administration.** The two respondents in this sector did not provide the challenges any 'very relevant', and there were only five responses for 'relevant'. These were for access to internet and no/cost of internet, patients' access to a device, patients' access to internet, and patients' internet connectivity.

#### Statements

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Management and Administration are discussed individually below, as there were only two respondents.

**Primary and Secondary care.** The distributions of responses to the statements are displayed in Tables 102-105 for Primary and Secondary care.

	Regularly use VC		Appointment offered as a choice to patient		Dedicated team implementing VC		Clinicians keen to use VC	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	61.5	81.6	17.4	46.9	33.3	42.0	65.4	60.8
False	34.6	12.2	78.3	40.8	66.7	30.0	15.4	7.8
Unable to say	3.8	6.1	4.3	12.2	0.0	28.0	19.2	31.4
Freq.	26	49	23	49	24	50	26	51

Table 102. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

### Table 103. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Management keen to use VC		Admin keen to use VC		VC is equ	vivalent to TC	VC is equ	VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
True	47.1	88.2	38.9	39.2	32.0	45.1	19.2	18.4	
False	23.5	3.9	27.8	17.6	48.0	39.2	65.4	69.4	
Unable to say	29.4	7.8	33.3	43.1	20.0	15.7	15.4	12.2	
Freq.	17	51	18	51	25	51	26	49	



### Table 104. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	-	ate support ailable		d adequate aining		ent internet nectivity	Adequate equipment is available	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	46.2	29.4	52.0	66.7	65.4	40.0	80.8	36.0
False	23.1	37.3	36.0	19.6	7.7	42.0	15.4	54.0
Unable to say	30.8	33.3	12.0	13.7	26.9	18.0	3.8	10.0
Freq.	26	51	25	51	26	50	26	50

### Table 105. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate space/rooms are available		Able to log VC in booking systems		Bookings are set up for VC		Concerns about security have been resolved	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	92.3	38.0	42.9	66.0	26.3	43.1	52.4	38.0
False	3.8	44.0	42.9	16.0	73.7	15.7	19.0	14.0
Unable to say	3.8	18.0	14.3	18.0	41.2	41.2	28.6	48.0
Freq.	26	50	21	50	26	51	21	50

Overall, Primary and Secondary care differed in their responses given for the above statements, except for clinical and administration colleagues being keen to use VC, and VC being the equivalent to FTF. The largest difference between Primary and Secondary care having adequate rooms or space available, whereby Primary care professionals responded 'true' 92.3% of the time, compared with only 38% of Secondary care professionals. In addition to this, there was a notable difference between the two care sectors for the statement regarding having adequate equipment available, where Primary care professionals responded 'true' 92.3% of the statement regarding having adequate equipment available, where Primary care professionals responded 'true' 80.8% of the time, compared with only 36% of Secondary care.

**Management and Administration.** Six of the above statements had more than one 'false' response, and these were having a dedicated team to implementing VC, receiving adequate support and training, having adequate equipment, and that VC is offered as a choice. The remaining seven statements were responded to with either 'true' or 'unable to say'.



#### Summary of CTMUHB

The analysis of the data revealed interesting findings in terms of professionals' opinions, resulting from asking them to reflect on their previous experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding their use of VC, even when faced with the potential challenges.

The majority of professionals in CTMUHB believed that VC should be used when it is appropriate, with some professionals exhibiting hesitancy in their decision, and Primary and Secondary care sectors expressed similarities in their responses. In addition, professionals perceived their usage to be quite low within their service, such as being used more amongst Secondary care professionals than Primary, for instance.

Overall, professionals in CTMUHB rated VC beneficial for the possible outcomes. Secondary care was revealed to be more positive in their responses, however, all care sectors exhibited positive opinions regarding VC. In particular, VC was seen to benefit the patient in that it reduces the need for traveling to and from appointments and limits the risk of viral transmission. On the other hand, although the responses were generally positive, VC was viewed to be less beneficial for specific aspects of work, such as reducing waiting times and the likelihood of DNAs.

Moving on and considering the challenges, professionals viewed the potential challenges to be more relevant in introducing difficulties for patients than themselves, such as technological limitations and lacking confidence. However, it was still evident that technology introduced difficulties for professionals. Overall, these findings highlight the lower rated aspects of VC are typically perceived from a technological perspective. For Primary and Secondary care, similarities emerged in the relevancy of the challenges, as well as these being more relevant for patients.



Finally, respondents were given a series of statements to capture an idea of their perceptions of VC. It was revealed that large proportions of respondents were regularly using VC, their colleagues were keen to make use (including Management and other professionals), and that they had received adequate training to enable them to use VC. On the other hand, professionals were not happy to say that VC was the equivalent to FTF, which suggests that VC does not fully replace or fulfils the needs of professionals as FTF does. Furthermore, there were many respondents that stated they did not have access to sufficient equipment, space to conduct VC, or internet connectivity. These areas also emerged as particularly difficult for Secondary care, with high numbers of 'false' responses for these statements. This suggests that Secondary care professionals may experience difficulties with VC due to a lack of availability of adequate resources. Management and Administration also responded positively, except for, once again, VC being the equivalent to FTF.

In summary, the responses in CTMUHB were generally positive, and there were small differences between Primary and Secondary care, although Secondary care professionals seemed slightly more positive than Primary. These findings suggest that VC is accepted amongst professionals, allowing the use of VC to continue within their departments or services. Regardless of the challenges faced, such as barriers to accessing healthcare due to technological restraints, VC is implied to be positively perceived by the professionals in CTMUHB.



### Hywel Dda University Health Board (HDUHB)

There was a total of n=125 responses in HDUHB. There were n = 31 males, n = 90 females, n = 2 prefer not to say, and n = 2 did not state their gender. Two respondents were 18-24 years old, n = 58 were 25-44 years old, and n = 62 were 45-64 years old.

#### Should VC be used HDUHB?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

80.8% of responses reported 'yes', and only 2.4% reported 'no'. These responses are shown in Figure 58. This suggests that professionals in HDUHB believe that VC should be used when appropriate.





#### Use of VC within Department/Service.

Also, professionals were also asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). There was a total of 125 responses for this question, and the mean response was 47.25 (SD = 27.48) This suggests that professionals in HDUHB perceive their use of VC within their department or service to be almost half-way between

ad hoc and widespread, but this is slightly more ad hoc. Nevertheless, based on the high standard deviation, there is a widespread variation across the professionals in this Health Board.

#### Benefits of VC in HDUHB

There were thirteen questions included in this survey that asked respondents to rate how beneficial they believed possible advantages of VC were, on a 5point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 106 and Table 107 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible advantages. These are discussed individually below.

Table 106. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives. Saves time, Saves Saves travel Environmental Saves Saves

	space, and preparation.	travel and parking	and parking (patient)	benefits	taking time off work.	money (e.g., travel, childcare)
Not at all Beneficial	11.4	5.2	1.6	1.6	10.4	6.6
Not Beneficial	11.4	10.4	0.8	5.7	7.8	4.9
Quite Beneficial	13.8	12.2	9.6	17.2	17.4	13.1
Beneficial	23.6	16.5	20.0	21.3	26.1	23.8
Very beneficial	39.8	55.7	68.0	54.1	38.3	51.6
Freq.	123	115	126	122	115	122

#### Table 107. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	8.9	6.4	13.4	13.0	13.0	0.8	11.5
Not Beneficial	6.5	5.6	16.0	11.4	8.7	4.0	8.2
Quite Beneficial	19.4	14.4	21.8	28.5	29.6	9.7	40.2
Beneficial	24.2	23.2	23.5	25.2	26.1	24.2	18.0
Very beneficial	41.1	50.4	25.2	22.0	22.6	61.3	22.1
Freq.	124	63	119	123	115	124	122



**Saves time, space, and preparation.** 63.4% of respondents stated that VC was 'very beneficial' or 'beneficial' for saving time, space, and preparation, with an additional 13.8% reporting the aspect as 'quite beneficial'.

**Saves travel and parking (professional & patient).** Although VC was seen as more beneficial for saving travel and parking for the patient (88% 'very beneficial' or 'beneficial'), this was also beneficial for the professional (72.2% 'very beneficial' or 'beneficial').

**Environmental benefits.** The majority of responses (75.4%) for this advantage of VC were 'very beneficial' or 'beneficial', with only 7.3% stating that it was 'not at all beneficial' or 'not beneficial', suggesting that professionals perceive VC to be positive for the environment.

**Saves taking time off work & Saves money.** The largest benefit of the two was saving money, with 75.4% stating that VC was 'very beneficial' or 'beneficial'. Saving taking time off work was less positive, with 64.4% of responses for 'very beneficial' or 'beneficial', and 18.2% stating 'not at all beneficial' or 'not beneficial'.

**Improves access to care & improves convenience**. These advantages were seen as 'very beneficial' or 'beneficial' by 65.3% for accessing care, and 73.6% for convenience. This suggests that professionals rate VC positively for these aspects, and that it is more convenient and aids in improving access to care.

**Reduces wait times and reduces likelihood of DNAs.** Reducing wait times was reported to be 'very beneficial' or 'beneficial' by 48.7% of respondents as well as reported to reduce DNAs by 47.2%. This suggests that VC is not as beneficial for reducing waiting times and DNA rates when compared with the other outcomes.

**Improves family involvement and support**. 48.7% of respondents perceived VC to be 'very beneficial' or 'beneficial' for improving family involvement and support, with an additional 29.6% reporting this as 'quite beneficial'.

**Lowers rates of infection.** This was one of the largest benefits reported, with 85.5% of responses considering this aspect as 'very beneficial' or 'beneficial', and only 4.8% stated VC was 'not at all beneficial' or 'not beneficial' for reducing the rates of infection.



**Lowers stress and anxiety.** The majority of responses for this advantage was reported as 'quite beneficial' (40.2%) by respondents, followed by 40.1% for being both 'very beneficial' or 'beneficial'. This suggests that VC is seen as less beneficial than the other outcomes for reducing levels of stress and anxiety.

#### Challenges of VC for HDUHB

Eight different challenges were proposed to professionals that could potentially make VC difficult for themselves (Table 108) and for patients (Table 109). Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

Table 108. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals.

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	37.3	45.2	18.5	36.4	33.9	27.0	50.0
A little relevant	12.7	13.9	16.0	16.9	23.7	26.1	21.4
Relevant	17.8	13.9	20.2	18.6	20.3	25.2	18.8
Very Relevant	32.2	27.0	45.4	28.0	22.0	21.6	9.8
Freq.	118	115	119	118	118	111	112

Table 109. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	0.8	3.2	0.0	8.9	9.1	12.5	2.4
A little relevant	9.7	12.1	12.9	18.7	23.1	18.3	16.1
Relevant	26.6	25.0	21.8	26.0	33.9	30.8	29.8
Very Relevant	62.9	59.7	65.3	46.3	33.9	38.3	51.6
Freq.	124	124	124	123	121	120	124

Overall, professionals rated the challenges as more relevant for their patients than themselves, except for having no support or VC not being appropriate or



suitable, where these scores were similar between the perceptions. Notable differences between professionals' difficulties and the perceptions of patients' include having a lack of confidence (Figure 59) and access to a device (Figure 60).



Figure 59. The distribution of relevancy ratings for challenges introduced by having access to a device, for professionals and patients.





The most relevant challenge for the professionals was having poor internet connection, whereby 45.4% stated this was 'very relevant'. The least relevant, on the other hand, was having a lack of confidence. In terms of challenges for



patients, the most relevant was also poor internet connection, whereas the least relevant was having adequate support from family and friends.

**Preference for FTF or TC.** In addition to the above challenges that may introduce difficulties, professionals were also asked whether a preference for FTF or TC would impact VC for both professionals and for patients. The responses for patients' challenges were more relevant than their own, suggesting that the preference for FTF or TC introduces more difficulties for patients than for professionals. This is displayed in Figure 61.





#### Statements of VC Use in HDUHB

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 110 and Table 111.



	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinicians keen to use VC	Management keen to use VC	Admin keen to use VC	VC is equivalent to TC	VC is equivalent to FTF
True	76.6	45.0	52.4	69.6	76.0	43.1	38.4	21.8
False	18.5	44.2	28.2	11.2	8.8	23.6	48.8	63.7
Unable to say	4.8	10.8	19.4	19.2	15.2	33.3	12.8	14.5
Freq.	124	120	124	125	125	123	125	124

#### able 110. The distributions of responses to each of the statements regarding VC.

#### Table 111. The distributions of responses to each of the statements regarding VC.

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security resolved
True	42.4	69.1	41.6	51.2	47.6	54.5	40.5	50.8
False	32.0	21.1	37.6	40.8	41.9	24.0	35.5	10.0
Unable to say	25.6	9.8	20.8	8.0	10.5	21.5	24.0	39.2
Freq.	125	123	125	125	124	121	121	120

**Regularly use VC.** The majority of respondents stated that this statement was 'true', and that they are regularly using VC (76.6%).

**Appointment offered as a choice**. Almost the same proportion of respondents stated 'true' (45.0%) to this statement as 'false' (44.2%), suggesting that the same number of professionals offer the appointment choice to patients as those who do not.

**Dedicated team implementing VC.** More than half of respondents stated they have a dedicated team that is responsible for the implementation of VC, with 52.4% responding 'true' to this statement. However, there was still a relatively large proportion of responses (19.4%) for 'unable to say'.

**Colleagues keen to use VC**. The colleagues who seemed to be the keenest to use VC were management colleagues, with 76% of the responses being for 'true'. This is compared to 69.6% for clinical colleagues, and 43.1% for administration colleagues.

VC is equivalent to TC or FTF. For the statement regarding VC being the equivalent to TC, only 38.4% responded 'true', 48.8% for 'false'. This suggests that the majority of respondents do not view VC as equivalent to TC. Considering FTF, only 21.8% responded 'true', and 63.7% were 'false'.



Adequate support, training, connectivity, equipment, and space/rooms. The majority of responses for all the above statements were 'true', however, there was a similar proportion of responses for 'true' and 'false' for having adequate equipment and space/rooms available and having sufficient internet connectivity.

Able to log VC and booking systems are set up. In terms of logging VC in their booking systems, professionals responded 'true' to this 54.4% of the time, suggesting that over half of professionals are able to do this. A fewer number of professionals responded 'true' to having their booking systems set up, with 40.5% responses.

**Concerns about security of been resolved.** The majority of respondents (50.8%) reported that this statement was 'true', suggesting their concerns had been resolved. However, there were also 39.2% of responses for 'unable to say', suggesting that they had not encountered these issues, or were uncertain of this statement.

#### Care Sector Findings in HDUHB

This section will consider the findings from Primary, Secondary, and Community care, as well as responses from Management and Administration. There were n = 17 responses from Primary care, n = 85 in Secondary, n = 1 in Community, and n = 7 for Management and Administration. A total of n = 15 respondents stated 'other', but did not report their specialty or profession, or did not respond at all. Thus, these were excluded.

	Primary		Secondo	iry	Managen	nent/Admin
Gender	Freq.	%	Freq.	%	Freq.	%
Male	6	35.3	20	24.1	0	0.0
Female	11	64.7	62	74.7	7	100.0
Non-Binary	0	0.0	0	0.0	0	0.0
PNTS	0	0.0	1	1.2	0	0.0
Freq.	17		83		7	
Age						
18-24	8	2.4	2	2.4	0	0.0
25-44	9	45.8	38	45.8	3	42.9
45-64	0	0.0	43	51.8	3	42.9
65-80	0	0.0	0	0.0	0	0.0
Over 80	0	0.0	0	0.0	0	0.0
Freq.	17	÷	83	·	6	·

Table 112 displays the demographics of respondents in each care sector in HDUHB. The one individual in Community care was female and aged 45-64.



#### Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The response to this question for each care sector, as well as Management and Administration is displayed in Figure 62. The one individual in Community care stated 'maybe'. Secondary care (n = 85) were more positive in their responses, with 90.6% stating 'yes', and only 2.4% for 'no'. Primary care (n = 17) professionals were still positive, with only 5.9% responding 'no'. There was a larger proportion of 'maybe' responses in Primary care than Secondary care.



Figure 62. The distributions of responses to should VC be used in each care sector (except Community care due to low group size).

#### Use of VC within Department/Service.

The responses to where professionals rated their service or department on the scale from 0 (ad hoc) to 100 (widespread routine practice) in each care sector are displayed in Figure 63. There was only one response in Community, and this was a score of 28. It is also important to note that there were only 7 responses in Management and Administration. However, the responses suggest that Secondary care professionals (n = 85) perceive their usage of VC to be an



average of ad hoc and widespread (M = 51.38, SD = 26.35), compared with Primary care professionals (n = 17) who see their usage as more ad hoc (M = 25.77, SD = 27.14). Nevertheless, based on the high standard deviation, there is a widespread variation across care sectors.



Figure 63. The mean scores of the question regarding the usage of VC within the professionals' department/service in each care sector.

#### Benefits

The responses to the thirteen possible benefits of VC are displayed in Tables 113-116 for both Primary and Secondary care, in order to see the differences between the two care sectors. Community care and Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary care.

**Primary and Secondary care.** The responses for Primary and Secondary care are displayed in Tables 113-116. For all statements, Secondary care were more positive in their responses than Primary, except for reduction of wait times, reducing DNAs, improving family involvement and support, and lowering stress and anxiety. The smallest difference between Primary and Secondary care in their responses for 'very beneficial' was for saving time, space, and preparation.



## Table 113. The distributions (%) of responses to how 'beneficial' each possible advantage is from the Primary and Secondary care professionals' perspectives.

		ne, space, eparation.		ravel and Irking	Saves travel and parking (patient)		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not at all Beneficial	29.4	4.8	11.8	3.9	0.0	1.2	
Not Beneficial	11.8	10.7	17.6	6.6	0.0	1.2	
Quite Beneficial	11.8	15.5	23.5	7.9	17.6	5.9	
Beneficial	5.9	26.2	11.8	13.2	29.4	17.6	
Very beneficial	41.2	42.9	35.3	68.4	52.9	74.1	
Freq.	17	84	17	76	17	85	

## Table 114. The distributions (%) of responses to how 'beneficial' each possible advantage is from the professionals' perspectives.

		nmental nefits		king time off vork.	Saves money (e.g., travel, childcare)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	0.0	1.2	18.8	5.1	5.9	3.6
Not Beneficial	18.8	2.4	6.3	6.4	11.8	3.6
Quite Beneficial	31.3	13.3	12.5	20.5	29.4	10.8
Beneficial	12.5	24.1	18.8	29.5	17.6	24.1
Very beneficial	37.5	59.0	43.8	38.5	35.5	57.8
Freq.	16	83	16	78	17	83

### Table 115. The distributions (%) of responses to how 'beneficial' each possible advantage is from the professionals' perspectives.

		s access to are		proves enience	Reduces wait times	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	17.6	2.4	5.9	2.4	17.6	7.5
Not Beneficial	11.8	6.0	11.8	5.9	29.4	17.5
Quite Beneficial	17.6	22.6	17.6	12.9	0.0	26.3
Beneficial	17.6	22.6	17.6	24.7	11.8	25.0
Very beneficial	35.3	46.4	47.1	54.1	41.2	23.8
Freq.	17	84	17	85	17	80



### Table 116. The distributions (%) of responses to how 'beneficial' each possible advantage is from the professionals' perspectives.

	Reduces likelihood of DNAs		Improves family involvement and support		Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	11.8	9.5	18.8	6.5	0.0	1.2	11.8	7.3
Not Beneficial	17.6	11.9	25.0	7.8	5.9	2.4	11.8	8.5
Quite Beneficial	23.5	28.6	12.5	33.8	35.3	5.9	29.4	42.7
Beneficial	17.6	29.8	12.5	29.9	17.6	23.5	17.6	20.7
Very beneficial	29.4	20.2	31.3	22.1	41.2	67.1	29.4	20.7
Freq.	17	84	16	77	17	85	17	82

The most beneficial aspect for Primary care was for saving patient travel and parking, and the least beneficial was lowering stress and anxiety and reducing the likelihood of DNAs. For Secondary care, the most beneficial was also saving travel and parking for the patient, whereby the least beneficial was reducing the likelihood of DNAs.

**Community care.** The one respondent in Community care viewed these advantages as relatively beneficial, except for saving money, improving access to care, reducing wait times, improving family support, and reducing stress and anxiety.

**Management and Administration.** There were only 7 respondents for Management and Administration, the responses are displayed in Figure 7 and Figure 64 and Figure 65. Overall, the responses were positive, and only saves money was given 'not at all beneficial'.

## Figure 64 and Figure 65. The distributions of responses to how 'beneficial' each possible advantage is, according to Administration and Management teams.





#### Challenges

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These will be considered for Primary and Secondary care, in order to see the differences between the two care sectors. Community care, Management and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary.

**Primary and Secondary.** Table 117-120 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (117 and 118) and patients (119 and 120), in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	56.3	35.8	56.3	42.3	35.3	17.3	70.6	32.5
A little relevant	6.3	14.8	12.5	14.1	11.8	17.3	11.8	16.3
Relevant	25.0	16.0	18.8	14.1	11.8	22.2	17.6	21.3
Very Relevant	12.5	33.3	12.5	29.5	41.2	43.2	0.0	30.0
Freq.	16	81	16	78	17	81	17	80

Table 117. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

Table 118. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	No serv	ice support	Not appropri	ate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	43.8	35.8	31.3	28.0	82.4	42.7	
A little relevant	25.0	19.8	31.3	26.7	5.9	26.7	
Relevant	12.5	24.7	18.8	28.0	0.0	21.3	
Very Relevant	18.8	19.8	18.8	17.3	11.8	9.3	
Freq.	16	81	16	75	17	75	

Table 119. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	0.0	1.2	0.0	4.7	0.0	0.0	12.5	9.4
A little relevant	11.8	10.6	11.8	10.6	5.9	14.1	12.5	21.2
Relevant	17.6	27.1	17.6	25.9	17.6	23.5	37.5	23.5
Very Relevant	70.6	61.2	70.6	58.8	76.5	62.4	37.5	54.9
Freq.	17	85	17	85	17	85	16	85



### Table 120. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Adequate support			ropriate or able	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	5.9	9.6	6.3	14.5	0.0	3.5	
A little relevant	5.9	28.9	6.3	18.1	5.9	15.3	
Relevant	47.1	27.7	25.0	34.9	11.8	34.1	
Very Relevant	41.2	33.7	62.5	32.5	82.4	47.1	
Freq.	17	83	16	83	17	85	

In terms of comparing Primary and Secondary care, some of the professionals' own challenges were more relevant for Primary care, and some were more relevant for Secondary care, and thus the two differed for these. They also exhibited differences for patient difficulties.

The challenges that introduced the largest difference between the two care sectors for their own difficulties was access to a safe space, whereby this was more relevant for Secondary care. The most similar ratings, on the other hand, was for no service support, whereby the majority of responses were for 'not relevant' in both sectors.

In terms of the differences between patients and professionals' difficulties introduced by these challenges, there were large discrepancies in relevancy ratings for all of the above challenges. However, the biggest difference between these perceptions was for a lack of confidence in Primary and Secondary care (Figure 66).



Figure 66. The distribution of relevancy ratings for having a lack of confidence introducing difficulties for VC, for patients and professionals, in Primary care and Secondary care.



**Preference of FTF or TC.** In addition to the challenges above, professionals were also asked if a preference for FTF would introduce difficulties with VC for themselves and patients. These responses are displayed in Figure 67.

Firstly, there were differences between Primary and Secondary care on the relevancy ratings given to this challenge. In particular, 35.3% of Primary care professionals stated that this challenge was very relevant for themselves, compared with only 20.3% of Secondary care professionals. Also, there seemed to be differences between the perceptions of their own difficulties and patients' difficulties, with this challenge being more relevant for patients than for themselves.



Figure 67. The distribution of relevancy ratings for the preference of FTF or telephone introducing difficulties for VC, for patients and professionals, in Primary care and Secondary care.



**Community care.** The one respondent in Community care stated that all of the above challenges were 'very relevant', except for a lack of confidence, where this was given a rating of 'beneficial'.

**Management and Administration.** Overall, Management and Administration rated patient difficulties as more relevant than professionals. The responses are displayed in Figure 68 and Figure 69. The most relevant challenge seemed to be having a preference for FTF or TC for their own, and also for patients, although the relevancy ratings were higher for patients.



Figure 68 (top) and Figure 69 (bottom). The distributions of relevancy ratings for difficulties with VC for the professional (top) and patient (bottom), for Management and Administration respondents.





#### Statements

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. These are considered for Primary and Secondary care, in order to see the differences between the two care sectors. Community care, Management

and Administration are discussed individually below, as they both had smaller group sizes compared with Primary and Secondary.

**Primary and Secondary care.** The distributions of responses to the statements are displayed in Tables 121-124 for Primary and Secondary care.

Table 121. The distributions of responses to each of the statements regarding VC in Primary and Secondary care (1/4).

	Regularly use VC		Appointment offered as a choice to patient		Dedicated team implementing VC		Clinicians keen to use VC	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	64.7	79.8	35.3	45.8	23.5	57.1	64.7	71.8
False	35.3	14.3	58.8	44.6	70.6	20.2	23.5	8.2
Unable to say	0.0	6.0	5.9	9.6	5.9	22.6	11.8	20.0
Freq.	17	84	17	83	17	84	17	85

### Table 122. The distributions of responses to each of the statements regarding VC in Primary and Secondary care (2/4).

	Management keen to use VC		Admin keen to use VC		VC is equivalent to telephone		VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	52.9	80.0	35.3	42.9	35.3	36.5	41.2	22.6
False	29.4	5.9	47.1	22.6	64.7	48.2	52.9	63.1
Unable to say	17.6	14.1	17.6	34.5	0.0	15.3	5.9	14.3
Freq.	17	85	17	84	17	85	17	84



### Table 123. The distributions of responses to each of the statements regarding VC in Primary and Secondary care (3/4).

	Adequate support available		Received adequate training		Sufficient internet connectivity		Adequate equipment is available	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	41.2	44.7	58.8	78.3	47.1	40.0	70.6	51.8
False	35.3	27.1	35.3	14.5	35.3	35.3	29.4	38.8
Unable to say	23.5	28.2	5.9	7.2	17.6	24.7	0.0	9.4
Freq.	17	85	17	83	17	85	17	85

Table 124. The distributions of responses to each of the statements regarding VC in Primary and Secondary care (4/4).

	Adequate space/rooms are available		Able to log VC in booking systems		Bookings are set up for VC		Concerns about security have been resolved	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	82.4	40.5	47.1	59.8	23.5	44.4	43.8	51.2
False	17.6	47.6	35.3	18.3	64.7	25.9	12.5	8.5
Unable to say	0.0	11.9	17.6	22.0	11.8	29.6	43.8	40.2
Freq.	17	84	17	82	17	81	16	82

Overall, Secondary care was more positive in their responses than Primary care, except for the statements regarding VC being the equivalent to FTF, having sufficient internet connectivity, and having adequate equipment and space/rooms available. For these statements, Primary care had a higher proportion of 'true' responses. The largest difference in the number of 'true' responses was for the statement regarding having adequate rooms/space available, with 82.5% for Primary care and only 40.5% for Secondary care. The smallest difference, on the other hand, was for VC being the equivalent to TC, with only 1.2% difference between the care sectors for the proportion of 'true' responses.

**Community care.** The one respondent in Community care responded 'true' to the following statements: clinical, Management, and admin colleagues are



keen to use VC, they have sufficient internet connectivity, and VC is offered as a choice to the patient. The remaining statements were 'false'.

**Management and Administration.** The responses of the 7 respondents in Management and Administration are displayed in Figure 70 and Figure 71. The largest proportion of 'true' responses were for the regular use of VC, compared with the smallest proportion for adequate support being available.



Figure 70 and Figure 71. The distribution of responses to the sixteen statements regarding VC for Management and Administration.



#### Summary of HDUHB

The analysis of the data revealed some interesting findings in terms of professionals' opinions, resulting from asking them to reflect on their previous experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding their use of VC, even when faced with the potential challenges.

The majority of professionals in HDUHB felt that VC should be used when it is appropriate, with some professionals exhibiting a level of hesitancy in their decision. On a positive note, there was only a very small number of professionals believe VC should not be used entirely. For the care sectors in particular, a more positive response was observed for Secondary care when compared with Primary care, however, overall the responses were very similar. In addition, when asked to consider their department/service's usage of VC, professionals perceived this to be almost halfway between ad hoc and widespread use, which overall represents a positive usage of VC within HDUHB. It was also evident that Secondary care reported more routine usage of VC in comparison to Primary care, whereby their usage was more towards only when necessary, identifying a gap to fill for Primary care professionals.

Overall, professionals in HDUHB rated VC beneficial for the potential outcomes. Secondary care was revealed to be slightly more positive in their responses for the majority of benefits, although all care sectors exhibited positive opinions of VC. In particular, VC was seen to reduce the time taken to travel to appointments, a reduced the risks of viral transmission. On the other hand, although receiving positive responses overall, VC was not as beneficial for other aspects, such as reducing the likelihood of DNAs.

Moving on and considering the difficulties with VC, professionals viewed the potential challenges as being more relevant for their patients than themselves, such as lacking confidence and being unable to access sufficient internet connectivity. However, respondents' issues with technology were still evident.



This suggests that the lower rated aspects of VC are typically viewed from a technological perspective.

Finally, respondents were given a series of statements to capture an idea of their perceptions of VC. It was revealed that large proportions of respondents were regularly using VC, their colleagues were keen to make use (including management and other professionals), and that they had received adequate training to enable them to use VC. On the other hand, professionals were not happy to say that VC was the equivalent to FTF, which suggests that VC does not fully replace or fulfils the needs of professionals as FTF does. Furthermore, there were many respondents that stated they did not have access to sufficient equipment, space to conduct VC, or internet connectivity, specifically emerging as difficult for Secondary care professionals, with high numbers of 'false' responses for these statements. This suggests that these professionals may experience difficulties with VC due to a lack of availability of adequate resources.

In summary, the responses in HDUHB were generally positive, and there were small differences between Primary and Secondary care, although Secondary care professionals seemed slightly more positive than Primary. These findings suggest that overall, VC is accepted amongst professionals, allowing the use of VC to continue within their departments or services. Regardless of the challenges faced, such as barriers to accessing healthcare and poor internet connectivity, VC is implied to be positively perceived by these professionals.



### Powys Teaching Health Board (PTHB)

There was a total of n=95 responses in PTHB. There were n = 20 males, n = 71 females, n = 2 non-binary, and n = 2 did not stated a gender. In total, n = 4 were 18-24 years old, n = 33 were 25-44 years old, n = 53 were 45-64 years old, and n = 1 was 65-80 years old.

#### Should VC be used in PTHB?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The majority of responses reported 'yes' (67.4%), however, there was also a large proportion for 'maybe' (30.5%), suggesting that these professionals in PTHB would perhaps consider using VC. Figure 72 displays these responses.





#### Use of VC within Department/Service

Also, professionals were also asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). There were 92 responses for this question, and the mean score given was 45.63 (standard deviation = 32.83). This suggests that professionals in PTHB perceive their use of VC to be slightly more ad hoc than widespread. Nevertheless,



Beneficial

Freq.

Very beneficial

25.0

34.8

92

19.8

52.3

86

23.3

45.3

86

21.6

51.1

88

25.0

46.7

92

based on the high standard deviation, there is a widespread variation across professionals in this Health Board.

#### Benefits of VC for PTHB

There were thirteen questions included in this survey that asked respondents to rate how beneficial they believed possible advantages of VC were, on a 5point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 124 and Table 125 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible advantages. These are discussed individually below.

is from the professionals' perspectives. Saves time, Saves travel Environmental Saves Saves Saves space, and travel and benefits taking and parking money (e.g parking preparation. (patient) time off travel. work. childcare) Not at all 3.3 10.9 11.6 1.1 4.7 5.7 Beneficial Not Beneficial 9.8 3.5 0.0 6.5 11.6 1.1 Quite Beneficial 19.6 12.8 9.6 18.5 15.1 20.5

21.3

68.1

94

Table 124. The distributions (%) of responses to how VC would benefit each possible advantage

#### Table 125. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	6.4	2.2	11.1	8.8	17.6	2.2	13.0
Not Beneficial	11.7	3.3	17.8	16.5	20.0	2.2	15.2
Quite Beneficial	29.8	30.8	24.4	28.6	28.2	14.0	39.1
Beneficial	25.5	24.2	17.8	23.1	16.5	22.6	14.1
Very beneficial	26.6	39.6	28.9	23.1	17.6	59.1	18.5
Freq.	94	91	90	91	85	93	92



**Saves time, space, and preparation**. 59.8% of respondents stated that VC was 'very beneficial' or 'beneficial' for saving time, space, and preparation, and an additional 19.6% report this as 'quite beneficial'.

**Saves travel and parking (professional & patient).** VC was seen to be the most beneficial for saving travel and parking for the patient, with 89.4% reporting it as 'very beneficial' or 'beneficial' and only 1.1% stating this was 'not at all beneficial' (0% for 'not beneficial'). Saving parking and travel for the professional was seen to be 'very beneficial' or 'beneficial' by 72.1% of the respondents.

**Environmental benefits.** VC was seen to be considered to benefit the environment with 71.7% reporting this aspect as 'very beneficial' or 'beneficial'.

**Saves taking time off work & saves money**. Saving money was rated positively, with 72.7% respondents stating 'very beneficial' or 'beneficial'. Saving taking time off work was rated 'very beneficial' or 'beneficial' by 68.6%, thus suggesting the responses are positive for themselves and their patients.

**Improves access to care & improves convenience**. In total, 52.1% of responses suggested that VC was 'very beneficial' or 'beneficial' for improving access to care. For improving convenience, 63.8% of respondents reported it as 'very beneficial' or 'beneficial'.

**Reduces wait times & reduces likelihood of DNAs.** The reduction of waiting times was reported to be 'very beneficial' or 'beneficial' by 46.7% of respondents, this was rated by 46.2% for reducing DNAs (as 'very beneficial' or 'beneficial').

**Improves family involvement and support**. This was the least beneficial aspect of VC from the professionals' perspective, shown by only 34.1% of responses for 'very beneficial' or 'beneficial', with 37.7% reporting it as 'not at all beneficial' or 'not beneficial'.

**Lowers rates of infection.** A high proportion (81.7%) perceived VC to be 'very beneficial' or 'beneficial' for lowering rates of infection with only 4.4% of responses for 'not beneficial' or 'not at all beneficial'.

Lowers stress and anxiety. Finally, VC was less beneficial for lowering stress and anxiety than other aspects but was still viewed positively, overall. In particular,



32.6% of responses for 'very beneficial' or 'beneficial' beneficial', yet 39.1% reported it as 'quite beneficial', and the remaining 28.3% for 'not at all beneficial' or 'not beneficial'.

#### Challenges of VC for PTHB

Eight different challenges were proposed to professionals that could potentially make VC difficult for themselves (Table 126) and for patients (Table 127). Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

Table 126. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals.

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	47.8	51.6	19.4	39.1	39.8	23.5	58.1
A little relevant	14.1	9.9	17.2	9.8	15.9	22.4	19.8
Relevant	13.0	9.9	23.7	27.2	22.7	30.6	12.8
Very Relevant	25.0	28.6	39.8	23.9	21.6	23.5	9.3
Freq.	92	91	93	92	88	85	86

Table 127. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	0.0	4.3	0.0	14.9	8.7	7.7	1.1
A little relevant	14.9	14.9	13.8	23.4	23.9	27.5	12.8
Relevant	21.3	23.4	19.1	27.7	22.8	28.6	23.4
Very Relevant	63.8	57.4	67.0	34.0	44.6	36.3	62.8
Freq.	94	94	94	94	92	91	94

Overall, there were notable differences between the relevancy ratings professionals gave their own challenges compared with their patients. The largest difference between these would be for a lack of confidence, whereby


9.3% rated this as 'very relevant' for their own challenges, and 62.8% for patients' challenges (Figure 73). The smallest difference, on the other hand, was for access to safe space.

The most relevant challenges for professionals alone seemed to be poor internet connection, whereby 39.8% reported this being 'very relevant'. For their patients, the most relevant was also poor or sufficient internet connection (67% very relevant), suggesting that internet connectivity is an important aspect of VC that introduces challenges for both professionals and patients.

Figure 73. The distribution of relevancy ratings for challenges introduced by having a lack of confidence, for professionals and patients.



**Preference of FTF or TC**. In addition to the above challenges that may introduce difficulties, professionals were also asked whether a preference for FTF or TC would impact VC for both professionals and for patients. The responses are displayed in Figure 74. Although this issue seemed to be relevant for professionals, it was more relevant for their patients, with a larger proportion of responses for 'very relevant' (26.1% for themselves, 55.4% for patients).



# Figure 74. The distribution of relevancy ratings for challenges introduced by having a preference for FTF or telephone, for professionals and patients.



#### Statements of VC Use in PTHB

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 128 and Table 129.

#### Table 128. The distributions of responses to each of the statements regarding VC (1/2).

	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinicians keen to use VC	Management keen to use VC	Admin keen to use VC	VC is equivalent to TC	VC is equivalent to FTF
True	67.4	50.6	46.7	76.8	80.9	48.9	45.2	10.8
False	23.2	36.0	29.3	8.4	5.3	25.6	35.5	71.0
Unable to say	9.5	13.5	23.9	14.7	13.8	25.6	19.4	18.3
Freq.	95	89	92	95	94	90	93	93

#### Table 129. The distributions of responses to each of the statements regarding VC (2/2)

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security resolved
True	48.4	78.7	43.2	73.7	62.1	58.1	58.6	52.7
False	22.1	10.6	34.7	16.8	29.5	14.0	18.4	9.9
Unable to say	29.5	10.6	22.1	9.5	8.4	28.0	23.0	37.4
Freq.	95	94	95	95	95	93	87	91



**Regularly use VC.** The majority of respondents reported that they use VC regularly, with 67.4% stating 'true' to this statement.

**Appointment offered as a choice to patient.** Just about half of the respondents (50.6%) responded 'true' to this statement, with an additional 13.5% reporting to be uncertain.

**Dedicated team implementing VC.** 23.9% of respondents were unable to say whether they had a dedicated team to implement VC, suggesting they were unaware of this. However, the majority responded 'true' to this statement (46.7%).

**Colleagues keen to use VC.** Clinical (76.8%) and Management (80.9%) colleagues were considered to be keen to use VC, but administrative colleagues did not receive as positive of responses compared (48.9%). Although the majority of responses were 'true', 25.6% were 'unable to say', suggesting that they may be uncertain of the accuracy of these statements.

VC is equivalent to TC or FTF. Interestingly, responses to VC being the equivalent to TC were positive, with almost half (45.2%) of these being 'true'. This compares with being equivalent to FTF, whereby the highest proportion of responses were for 'false' (71%).

Adequate support, training, internet connectivity, equipment, and space rooms. For all of these statements, the highest proportion of responses were for 'true'. The least positive statement was having sufficient internet connectivity, as 34.7% stated that this was 'false'. On the other hand, the most positive was half adequate equipment available (73.7% 'true').

Able to log VC and bookings are set up. The responses to these were relatively similar. In particular, there were 58.1% of 'true' responses for being able to log VC in the booking systems, and 58.6% for bookings being set up for VC.

**Concerns about security.** Finally, the majority of responses were once again 'true', suggesting that half of professionals' issues with cyber security had been resolved. However, 37.4% stated that they were 'unable to say', suggesting they had not encountered these problems, or were uncertain of the accuracy of this statement.



#### Care Sector Findings in PTHB

This section considers the findings from Primary, Secondary care, and responses from Management and Administration. There were n = 15 responses from Primary care, n = 66 in Secondary care, and n = 8 for Management and Administration. A total of n = 6 respondents stated 'other', but did not report their specialty or profession, or did not respond at all. Thus, these were excluded. There were <u>no</u> responses for Community care in PTHB.

**Respondent demographics.** Table 130 displays the demographics of respondents in each care sector in PTHB.

	Primary		Secondo	ary	Managen	nent/Admin
Gender	Freq.	%	Freq.	%	Freq.	%
Male	7	46.7	13	20.3	0	0.0
Female	8	53.3	49	76.6	8	100.0
Non-Binary	0	0.0	2	3.1	0	0.0
PNTS	0	0.0	0	0.0	0	0.0
Freq.	15		64		8	
Age				•		
18-24	1	6.7	3	4.8	0	0.0
25-44	3	20.0	26	41.3	1	14.3
45-64	11	73.3	33	52.4	6	85.7
65-80	0	0.0	1	1.6	0	0.0
Over 80	0	0.0	0	0.0	0	0.0
Freq.	15	•	63	•	7	•

Table 130 displays the demographics of respondents in each care sector in PTUB

#### Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The response to this question for each care sector, including Management and Administration is displayed in Figure 75. Although Primary care (n = 15) had a higher proportion of 'yes' responses than Secondary care (n = 66), Secondary care had a larger response rated for 'maybe' than Primary care. Overall, Primary and Secondary care were similar in their responses, and would consider using VC when appropriate. However, Primary care had a smaller number of responses than Secondary care.





Figure 75. The distributions of responses to should VC be used in each care sector.

#### Use of VC within Department/Service.

The responses to where professionals rated their service or department on the scale from 0 (ad hoc) to 100 (widespread routine practice) in each care sector are displayed in Figure 76. The responses suggest that Secondary care perceive their usage of VC to be, on average, between ad hoc and widespread use (M = 54, SD = 32.33). This compares to Primary care, with a mean rating of 22.92 (SD = 29.17), these professionals perceive their usage to be more ad hoc. Nevertheless, based on the high standard deviation, there is a widespread variation across care sectors.



Figure 76. The mean scores of the question regarding the usage of VC within the professionals' department/service in each care sector.



#### Benefits

The responses to the thirteen possible benefits of VC are displayed in Tables 131-134 for both Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Management and Administration are discussed individually below, as they had a small group size compared with Primary and Secondary care.

**Primary and Secondary care.** The responses for Primary and Secondary care are displayed in Tables 131-134. Overall, Primary and Secondary care differed in the responses they gave the possible advantages of VC, in that Secondary care were more positive, and had higher proportions of 'very beneficial' ratings. However, Primary care had more positive responses for improving access to care, reducing the likelihood of DNAs, and lower levels of stress and anxiety.



# Table 131. The distributions (%) of responses to how 'beneficial' each possible advantage is from the Primary and Secondary care professionals' perspectives.

		ne, space, eparation.		ravel and rking	Saves travel and parking (patient)	
	Primary	Primary Secondary		Secondary	Primary	Secondary
Not at all Beneficial	6.7	13.8	7.7	11.5	6.7	0.0
Not Beneficial	20.0	9.2	7.7	1.6	0.0	0.0
Quite Beneficial	26.7	18.5	23.1	13.1	20.0	9.2
Beneficial	20.0	21.5	23.1	18.0	20.0	21.5
'very beneficial'	26.7	36.9	38.5	55.7	53.3	69.2
Freq.	15	65	13	61	15	65

# Table 132. The distributions (%) of responses to how 'beneficial' each possible advantage is from the professionals' perspectives.

		Environmental benefits		king time off vork	Saves money (e.g travel, childcare)	
	Primary	Primary Secondary P		Secondary	Primary	Secondary
Not at all Beneficial	13.3	1.6	7.1	5.2	14.3	5.0
Not Beneficial	0.0	7.9	7.1	15.5	0.0	1.7
Quite Beneficial	13.3	22.2	28.6	12.1	35.7	20.0
Beneficial	33.3	22.2	28.6	22.4	28.6	18.3
Very beneficial	40.0	46.0	28.6	44.8	21.4	55.0
Freq.	15	63	14	58	14	60

# Table 133. The distributions (%) of responses to how 'beneficial' each possible advantage is from the professionals' perspectives.

	-	Improves access to care		proves enience	Reduces	Reduces wait times	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not at all Beneficial	6.7	7.7	6.7	1.6	13.3	11.3	
Not Beneficial	0.0	15.4	0.0	4.8	20.0	21.0	
Quite Beneficial	46.7	27.7	33.3	30.6	33.3	21.0	
Beneficial	20.0	26.2	26.7	25.8	6.7	19.4	
Very beneficial	26.7	23.1	33.3	37.1	26.7	27.4	
Freq.	15	65	15	62	15	62	



Table 134. The distributions (%) of responses to how 'beneficial' each possible advantage is from the professionals' perspectives.

	Reduces likelihood of DNAs		Improves family involvement and support		Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	13.3	9.7	20.0	19.7	6.7	1.6	21.4	14.1
Not Beneficial	20.0	16.1	26.7	18.0	6.7	1.6	7.1	18.8
Quite Beneficial	13.3	32.3	20.0	29.5	26.7	10.9	42.9	35.9
Beneficial	26.7	25.8	20.0	16.4	26.7	23.4	7.1	17.2
Very beneficial	26.7	16.1	13.3	16.4	33.3	62.5	21.4	14.1
Freq.	15	62	15	61	15	64	14	64

The most beneficial advantage of VC for both Primary and Secondary care professionals was saving travel and parking for the patient, with only 6.7% of responses for 'not at all beneficial' in Primary care, and no responses for 'not at all beneficial' or 'not beneficial' in Secondary care. On the other hand, the least beneficial was reducing the likelihood of DNAs for Secondary care and improving family involvement and support for Primary care.

**Management and Administration.** All responses to the possible advantages of VC were seen as 'quite beneficial', 'beneficial', or 'very beneficial' to the respondents in this sector, except for environmental benefits, whereby one respondent stated this was 'not beneficial'.

#### Challenges

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Management and Administration are discussed individually below, as it had a smaller group size compared with Primary and Secondary care.

**Primary and Secondary care.** Table 134-137 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (134 and 135) and patients (136 and 137), in Primary and Secondary care.



# Table 134. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	30.8	53.0	38.5	55.4	14.3	21.5	61.5	36.4
A little relevant	23.1	13.6	15.4	10.8	28.6	15.4	7.7	10.6
Relevant	15.4	10.6	30.8	6.2	28.6	23.1	15.4	27.3
Very Relevant	30.8	22.7	15.4	27.7	28.6	40.0	15.4	25.8
Freq.	13	66	13	65	14	65	13	66

### Table 135. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	No servio	ce support	Not appropri	ate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	38.5	43.5	8.3	25.8	42.9	65.0	
A little relevant	23.1	12.9	25.0	21.0	28.6	16.7	
Relevant	23.1	21.0	50.0	25.8	21.4	8.3	
Very Relevant	15.4	22.6	16.7	27.4	7.1	10.0	
Freq.	13	62	12	62	14	60	

### Table 136. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Access to a device		No / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	0.0	0.0	0.0	6.1	0.0	0.0	13.3	16.7
A little relevant	0.0	18.2	13.3	16.7	13.3	15.2	33.3	19.7
Relevant	26.7	19.7	40.0	19.7	26.7	18.2	33.3	28.8
Very Relevant	73.3	62.1	46.7	57.6	60.0	66.7	20.0	34.8
Freq.	15	66	15	66	15	66	15	66



Table 137. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Adeque	Adequate support		iate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	6.7	10.8	13.3	6.3	0.0	1.5	
A little relevant	33.3	21.5	33.3	26.6	6.7	12.2	
Relevant	40.0	20.0	40.0	28.1	20.0	25.8	
Very Relevant	20.0	47.5	13.3	39.1	73.3	60.6	
Freq.	15	65	15	64	15	66	

Overall, the above findings suggest that Primary and Secondary care are somewhat similar in the relevancy ratings they give to the challenges, for both themselves and for their patients. In general, the challenges were more relevant for Secondary care professionals and patients, except for having access to a device (professional and patient), and the patients' lack of confidence.

The largest difference that existed between professionals' perceptions of their own and their patients' challenges (in both care sectors) was having a lack of confidence, such that this was more relevant for patients (Figure 77). These perceptions were most similar for not being appropriate or similar for Primary care professionals and having access to safe space for Secondary care professionals.



Figure 77. The distribution of relevancy ratings for having a lack of confidence introducing difficulties for VC, for patients and professionals, in Primary and Secondary care.



**Preference for FTF or TC.** In addition to the challenges above, professionals were also asked if a preference for FTF or TC would introduce difficulties with VC for themselves and their patients. In both care sectors, there were differences between professionals' perceptions of their own and their patients' difficulties introduced by this preference existing, in that this was more relevant for patients. However, these differences were minimal. Also, there did not seem to be a large difference between Primary and Secondary care. These responses are displayed in Figure 78.

Figure 78. The distribution of relevancy ratings for preferring FTF or telephone introducing difficulties for VC, for patients and professionals, in Primary and Secondary care.



**Management and Administration.** The responses for this sector are displayed in Figure 79 and Figure 80. Overall, the challenges were rated as more relevant for the patients than for themselves.

Figure 79 (top) and Figure 80 (bottom). The distributions of relevancy ratings for difficulties with VC for the professional (top) and patient (bottom), for Management and Administration respondents





#### Statements

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. These are considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors. Management and



Administration are discussed below, as it had a relatively smaller group size compared with Primary and Secondary care.

**Primary and Secondary care.** The distributions of responses to the statements are displayed in Tables 138-141 for Primary and Secondary care.

Table 138. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Regularly use VC		Appointment offered as a choice to patient		Dedicated team implementing VC		Clinicians keen to use VC	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	40.0	72.7	6.7	62.3	20.0	50.8	73.3	80.3
False	53.3	15.2	80.0	24.6	73.3	19.0	13.3	6.1
Unable to say	6.7	12.1	13.3	13.1	6.7	30.2	13.3	13.6
Freq.	15	66	15	61	15	63	15	66

### Table 139. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Management keen to use VC		Admin keen to use VC		VC is equivalent to telephone		VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	64.3	83.3	21.4	48.4	35.7	47.7	0.0	12.3
False	14.3	4.5	35.7	25.8	42.9	33.8	73.3	72.3
Unable to say	21.4	12.1	42.9	25.8	21.4	18.5	26.7	15.4
Freq.	14	66	14	62	14	65	15	65



### Table 140. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate support available		Received adequate training		connectivity		equi	equate pment is ailable
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	60.0	48.5	53.3	83.1	60.0	34.8	66.7	74.2
False	20.0	18.2	20.0	7.7	33.3	39.4	13.3	16.7
Unable to say	20.0	33.3	26.7	9.2	6.7	25.8	20.0	9.1
Freq.	15	66	15	65	15	66	15	66

### Table 141. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate space/rooms are available		Able to log VC in booking systems		Bookings are set up for VC		Concerns about security have been resolved	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	80.0	60.6	46.7	60.9	40.0	62.1	42.9	54.7
False	6.7	30.3	26.7	7.8	33.3	12.1	21.4	9.4
Unable to say	13.3	9.1	26.7	31.3	26.7	25.9	25.7	35.9
Freq.	15	66	15	64	15	58	14	64

Overall, Secondary care were more positive in their responses when compared with Primary care, giving more 'true' responses to the statements. This was the case except for the statements regarding having adequate support available, sufficient internet connectivity, equipment, and space/rooms available, where Primary care gave the most positive responses.

The largest difference between Primary and Secondary care responses was for offering the appointment to the patient, whereby only 6.7% of responses were 'true' in Primary care, compared with 62.3% in Secondary care. This suggests that Secondary care offer the choice to the patient more so than Primary care. The smallest difference, on the other hand, was for clinical colleagues being keen to use VC.



**Management and Administration.** The majority of responses to the above statements were 'true', except for having adequate space available. These responses are displayed in Figure 81 and Figure 82.



Figure 81 and Figure 82. The distribution of responses to the sixteen statements regarding VC for Management and Administration.

#### Summary of PTHB

The analysis of the data revealed some interesting findings in terms of professionals' opinions, resulting from asking them to reflect on their previous



experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding their use of VC, even when faced with the potential challenges.

The majority of professionals in PTHB felt that VC should be used when it is appropriate, with some professionals exhibiting a level of uncertainty regarding their decision. On a positive note, there was only a very small proportion of professionals that believe VC should not be used entirely. For the care sectors in particular, Secondary care professionals presented a higher level of uncertainty, although both were positive, it is important to note that there were only sixteen respondents in Primary care, thus possible skewing the results to appear more positive. Additionally, professionals identified that their usage of VC was almost halfway between "ad hoc" and "widespread", suggesting that it is used more than just when necessary. It was also evident that Secondary care reported more wide usage of VC in comparison to Primary care, whereby their usage was more towards only when necessary, identifying a gap to fill for Primary care professionals.

Overall, professionals in PTHB rated VC positively and beneficial for the outcomes that VC may lead to. Secondary care was revealed to be more positive in their responses for the majority of the benefits, however all care sectors still exhibited positive opinions regarding VC. In particular, VC was seen to benefit the patient, in that it allows for a reduction in the time taken to travel (and park) to and from their appointments, as well as reducing the risks of viral transmission. On the other hand, the reduction of DNAs received less beneficial responses compared with the other possible outcomes of VC, such that perhaps VC is not as beneficial for this aspect of health care, than others, although these were still viewed as positive by a large proportion of professionals.



Moving on and considering the difficulties with VC, professionals viewed the potential challenges to be more relevant in introducing difficulties for patients than themselves, such as lacking confidence, although respondents' technological difficulties were still highlighted. Overall, these findings highlight the lower rated aspects of VC are typically perceived from a technological perspective. These challenges also emerged in both Primary and Secondary care, such as having poor internet connection and access to a device, for both patients and professionals.

Finally, respondents were given a series of statements to capture an idea of their perceptions of VC. It was revealed that large proportions of respondents were regularly using VC, their colleagues were keen to make use (including Management and other professionals), and that they had received adequate training to enable them to use VC. On the other hand, professionals were not happy to say that VC was the equivalent to FTF, which suggests that VC does not fully replace or fulfils the needs of professionals as FTF does. Furthermore, there were many respondents that stated they did not have access to sufficient space to conduct VC, or internet connectivity. These areas also emerged as particularly difficult for Secondary care, with high numbers of 'false' responses for these statements. This suggests that Secondary care professionals may experience difficulties with VC due to a lack of availability of adequate resources.

In summary, the responses in PTHB were generally positive, and there were small differences between Primary and Secondary care, although Secondary care professionals seemed slightly more positive than Primary care. These findings suggest that overall, VC is accepted amongst professionals and their opinions of VC allow for the functioning of it within their department or service. This retrospective data implies, regardless of the challenges faced, such as barriers to accessing healthcare in specific circumstances, that VC is positively perceived by these professionals.



### Swansea Bay University Health Board (SBUHB)

There was a total of n = 117 respondents in SBUHB. There were n = 28 males, n = 84 females, n = 4 prefer not to say, and n = 1 did not state their gender. In total, n = 53 respondents were 25-44 years old, n = 60 were 45-64 years old, and n = 1 respondent was 65-80 years old.

#### Should VC be used in SBUHB?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

In total, 84.6% of respondents stated 'yes' and believed that VC should be used where appropriate. Only a small proportion (0.9%) stated that it should not. These responses are displayed in Figure 83.



#### Figure 83. The distribution of responses for should VC be used.

#### Use of VC within Department/Service

Also, professionals were also asked to rate, with a numerical figure, where they perceived their department or service to be regarding the use of VC, on a scale which ranged from 0 (ad hoc) to 100 (widespread routine practice). There were 116 responses for this question, and respondents had a mean score of 55.79 (SD = 31.18) along the scale. This suggests that professionals perceive their usage of VC within their department or service to be almost halfway between ad hoc and widespread, but this is slightly more widespread.



Nevertheless, based on the high standard deviation, there is a widespread variation across the respondents in SBUHB.

#### Benefits of VC for SBUHB

There were thirteen questions included in this survey that asked respondents to rate how beneficial they believed possible advantages of VC were, on a 5-point Likert scale, ranging from 1 ('not at all beneficial') to 5 ('very beneficial').

Table 142 and Table 143 displays the overall perceptions of how beneficial VC is in terms of thirteen different possible advantages. These are discussed individually below.

Table 142. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Saves time, space, and preparation.	Saves travel and parking	Saves travel and parking (patient)	Environmental benefits	Saves taking time off work.	Saves money (e.g travel, childcare)
Not at all Beneficial	5.3	5.7	0.0	1.8	4.5	4.5
Not Beneficial	14.2	11.3	1.8	2.7	3.6	2.7
Quite Beneficial	15.0	19.8	6.3	14.4	16.2	19.6
Beneficial	31.0	19.8	25.2	36.9	36.9	33.9
Very beneficial	34.5	43.4	66.7	44.1	38.7	33.9
Freq.	113	106	111	111	111	112

### Table 143. The distributions (%) of responses to how VC would benefit each possible advantage is from the professionals' perspectives.

	Improves access to care	Improves convenience	Reduces wait times	Reduces likelihood of DNAs	Improves family involvement and support	Lowers rates of infection	Lowers stress and anxiety
Not at all Beneficial	4.3	0.9	5.6	8.8	4.6	3.5	9.6
Not Beneficial	2.6	3.5	13.9	19.3	15.6	1.7	12.3
Quite Beneficial	27.0	19.3	18.5	28.9	28.4	10.4	39.5
Beneficial	37.4	36.8	34.3	23.7	27.5	27.8	23.7
Very beneficial	28.7	39.5	27.8	19.3	23.9	56.5	14.9
Freq.	115	114	108	114	109	115	114



**Saves time, space, and preparation.** VC was perceived as being 'very beneficial' or 'beneficial' for saving time, space, and preparation by 65.5% of respondents, with an additional 15% reporting it as 'quite beneficial'.

**Saves travel and parking (professional & patient).** Saving travel and parking for the patient was seen to be the most beneficial aspect of VC (91.9% as 'very beneficial' or 'beneficial'), with only 1.8% stating this was 'not beneficial' or 'not at all beneficial'. In terms of professional travel and parking, this was rated positively, with 63.2% reporting this as 'very beneficial' or 'beneficial'.

**Environmental**. This aspect was rated very high, with 81% respondents stating it is 'very beneficial' or 'beneficial'.

**Saves taking time off work & Saves money.** These aspects were also rated positively by professionals for both themselves and their patients, with 75.6% of respondents stating that VC was 'very beneficial' or 'beneficial' for saving taking time off work, and 67.8% for saving money such as travel and childcare.

**Improves access to care & Improves convenience**. Once again, these were both viewed as beneficial aspects of VC, with only 6.9% stating 'not beneficial' or 'not at all beneficial' for improving access to care and only 4.4% for improving convenience. Respondents reported this as 'very beneficial' or 'beneficial' for improving access 66.1% of the time and improving convenience 76.3% of the time.

**Reduces wait times & Reduces likelihood of DNAs**. Reducing the likelihood of DNAs was one of the least positive, with 43% stating that it was 'very beneficial' or 'beneficial'. On the other hand, these ratings were given by 62.1% of the respondents for reducing waiting times as 'very beneficial' or 'beneficial'.

**Improves family involvement and support.** 20.2% of respondents stated that this was 'not beneficial' or 'not at all beneficial', however, there were 51.4% of responses rating it as 'very beneficial' or 'beneficial'.

**Lowers rates of infection.** Once again, VC was positively rated as beneficial for lowering the rates of infection, with 84.3% of responses for 'very beneficial' or 'beneficial'.

**Lowers stress and anxiety.** This was the least beneficial aspect of VC according to professionals, with 38.6% of the responses reporting VC as 'very beneficial' or 'beneficial' to reducing the stress and anxiety for themselves or patients.



#### Challenges of VC for SBUHB

Eight different challenges were proposed to professionals that could potentially make VC difficult for themselves (Table 144) and for patients (Table 145). Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant').

Table 144. The distribution of relevancy ratings and how difficult the following challenges would

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	No service support	Not appropriate or suitable	Lack of confidence
Not relevant	45.0	43.1	18.6	23.9	27.5	26.9	50.0
A little relevant	16.5	11.9	15.9	19.5	30.3	26.9	19.8
Relevant	15.6	18.3	23.9	26.5	18.3	23.1	19.8
Very Relevant	22.9	26.6	41.6	30.1	23.9	23.1	10.4
Freq.	109	109	113	113	109	104	106

Table 145. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective).

	Access to a device	No / Cost of internet	Poor internet connection	Safe Space	Adequate support	Not appropriate or suitable	Lack of confidence
Not relevant	0.9	0.0	0.0	8.7	8.0	7.2	1.8
A little relevant	13.8	19.0	11.2	30.4	33.6	31.5	18.4
Relevant	35.3	33.6	33.6	27.8	26.5	31.5	33.3
Very Relevant	50.0	47.4	55.2	33.0	31.9	29.7	46.5
Freq.	116	116	116	115	113	111	114

The most relevant challenge that introduced difficulties with VC was having poor internet connection. This is demonstrated by almost half (41.6%) of respondents stating this challenge was 'very relevant'. On the other hand, the least relevant challenge was having a lack of confidence (10.4% stated 'very relevant'). In terms of the patients' challenges, the most relevant was also having poor internet connection (55.2% very relevant), and the least relevant was having adequate support available from family and friends (31.9% very relevant).



Overall, professionals rated patients' difficulties as more relevant than their own for introducing difficulties with VC. The challenge that introduced the largest difference between professionals and the perspective of patients' difficulties was having a lack of confidence, whereby this was more relevant for patients than professionals (Figure 84). The smallest difference was for accessing a safe space.





**Preference for FTF or TC:** In addition to the above challenges that may introduce difficulties, professionals were also asked whether a preference for FTF or TC would impact VC for both professionals and for patients. Overall, professionals rated this as being more relevant for their patients (2.7% 'not relevant') than themselves (50% 'not relevant'). This is displayed in Figure 85.

# Figure 85. The distribution of relevancy ratings for challenges introduced by having a preference for FTF or telephone, for professionals and patients.



#### Statements of VC Use in SBUHB

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. The responses are displayed in Table 146 and Table 147.

#### Table 146. The distributions of responses to each of the statements regarding VC.

	Regularly use VC	Appointment offered as a choice to patient	Dedicated team implementing VC	Clinicians keen to use VC	Management keen to use VC	Admin keen to use VC	VC is equivalent to telephone	VC is equivalent to FTF
True	80.3	41.1	51.8	72.4	74.8	43.8	45.7	25.0
False	13.7	46.4	32.5	16.4	7.8	17.8	39.7	60.3
Unable to say	6.0	12.5	15.8	11.2	17.4	38.4	14.7	14.7
Freq.	117	112	114	116	115	112	116	116

#### Table 147. The distributions of responses to each of the statements regarding VC.

	Adequate support available	Received adequate training	Sufficient internet connectivity	Adequate equipment is available	Adequate space/rooms are available	Able to log VC in booking systems	Bookings are set up for VC	Concerns about security have been resolved
True	47.9	69.9	56.5	69.8	53.5	56.9	52.3	48.6
False	29.1	17.7	28.7	20.7	34.2	19.3	31.5	15.6
Unable to say	23.1	12.4	14.8	9.5	12.3	23.9	16.2	35.8
Freq.	117	113	115	116	114	109	111	109



**Regularly use VC**. A large proportion of respondents stated 'true' to this statement (80.3%), which suggests that the majority of professionals use VC regularly.

**Appointment offered as a choice to patient.** Approximately the same proportion of respondents stated 'true' (41.1%) and 'false' (46.1%) to this statement, with a slightly larger percentage for 'false', suggesting that the appointment choice is not always offered to the patient.

**Dedicated team implementing VC.** Approximately half (51.8%) of respondents stated that they have a dedicated team for implementing VC, and thus, the responses for this statement were generally positive. However, 32.5% did state 'false', and an additional 15.8% were uncertain of the accuracy of this statement.

**Colleagues keen to use VC.** Overall, clinical and management colleagues were keen to use VC, with 72.4% stating 'true' for clinical and 74.8% for management colleagues. For administration colleagues, the most frequent response was 'true' (43.8%), however, there were 38.4% of responses for 'unable to say', suggesting that professionals were unsure of this statement.

**VC is equivalent to telephone and FTF.** VC was seen as the equivalent to TC by 45.7% of respondents. In comparison, only 25% of respondents believed VC to be the equivalent to FTF appointments, and this statement received the least positive responses from professionals.

Adequate support, training, internet connectivity, equipment, and space/rooms available. Overall, these statements were 'true' for the majority of respondents. The least positive was having adequate support available, whereby 47.9% stated 'true'. However, there were only 29.1% 'false' responses for this, compared with 34.2% for having adequate space/rooms available, suggesting that this was also rated less beneficial according to professionals.

Able to log VC & booking systems are set up. More than half of respondents stated that they are able to log VC (56.9%) and that their booking systems are set up for VC (52.3%).

**Concerns about cyber security.** 48.6% of respondents stated that their concerns about security had been resolved, and 35.8% stated they were 'unable to say', suggesting they had not encountered these issues or were uncertain of the accuracy of this statement.

#### Care Sector Findings in SBUHB

This section will consider the findings from Primary, Secondary, and Management and Administration. There were n = 20 responses from Primary care, n = 82 in Secondary, n = 1 respondent in Management and Administration. In total, n = 14 respondents stated 'other', but did not report their specialty or profession, or did not respond at all. Thus, these were excluded. There were <u>no</u> responses in Community care.

**Respondent demographics.** Table 148 displays the demographics of respondents in each care sector in SBUHB. The one individual in Management and Administration was female and aged 45-64.

	Primary		Secondary	
Gender	Freq.	%	Freq.	%
Male	6	30.0	20	24.7
Female	13	65.0	59	72.8
Non-Binary	0	0.0	0	0.0
PNTS	1	5.0	2	2.5
Freq.	20		82	
Age				·
18-24	0	0.0	0	0.0
25-44	5	26.3	39	48.8
45-64	14	73.7	40	50.0
65-80	0	0.0	1	1.3
Over 80	0	0.0	0	0.0
Freq.	19		80	

Table 148 displays the demographics of respondents in each care sector in SBUHB.

#### Should VC be used?

Professionals were asked the following question, "Do you think that video consulting should be used for health and social care appointments? (If it is appropriate, and no physical examination or blood test is required)." They were given the options, 'yes', 'no', and 'maybe'.

The responses for Primary and Secondary care are displayed in Figure 86. The one respondent in Management and Administration responded 'yes'. Overall, Primary care (n = 20) and Secondary care (n = 82) were similar in their responses, however, Primary care had a higher proportion of 'maybe' responses. Although the majority of professionals in both care sectors stated that VC should be used where appropriate.



#### Figure 86. The distributions of responses to should VC be used in Primary and Secondary care.

#### Use of VC within Department/Service

The responses to where professionals rated their service or department on the scale from 0 (ad hoc) to 100 (widespread routine practice) in Primary and Secondary care are displayed in Figure 87. The one respondent in Management and Administration gave a score of 75. Secondary care rated their usage as more widespread than Primary care, with a mean score of 63 (SD = 28.55), compared with 30.9 (SD = 30.24). Nevertheless, based on the high standard deviation, there is a widespread variation across respondents in this Health Board.



Figure 87. The mean scores of the question regarding the usage of VC within the professionals' department/service.



#### **Benefits**

The responses to the thirteen possible benefits of VC are displayed in Tables 149-152 for both Primary and Secondary care, in order to see the differences between the two care sectors.

**Primary and Secondary care.** The responses for Primary and Secondary care are displayed in Tables 149-152. Secondary care was more positive in their beneficial ratings than Primary care, in general. However, they were similar for four of the possible advantages. These were improving access to care and convenience, reducing wait times, and reducing the likelihood of DNAs.

Table 149. The distributions (%) of responses to how 'beneficial' each possible advantage is from the Primary and Secondary care professionals' perspectives.

	Saves time, space, and preparation.			avel and rking	Saves travel and parking (patient)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	5.3	4.9	5.9	5.2	0.0	0.0
Not Beneficial	15.8	14.8	17.6	9.1	10.5	0.0
Quite Beneficial	26.3	9.9	17.6	19.5	5.3	3.8
Beneficial	26.3	32.1	35.3	18.2	52.6	19.0
Very beneficial	26.3	38.3	23.5	48.1	31.6	77.2
Freq.	19	81	17	77	19	79

# Table 150. The distributions (%) of responses to how 'beneficial' each possible advantage is from the professionals' perspectives.

	Environmental benefits			king time off vork.		oney (e.g., childcare)
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	0.0	1.3	0.0	3.8	5.6	3.7
Not Beneficial	5.3	2.5	10.5	1.3	11.1	1.2
Quite Beneficial	0.0	16.5	21.1	16.5	16.7	18.3
Beneficial	57.9	34.2	42.1	35.4	44.4	32.9
Very beneficial	36.8	45.6	26.3	43.0	22.2	43.9
Freq.	19	79	19	79	18	82

# Table 151. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	•	Improves access to		convenience	Reduces wait times	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not at all Beneficial	0.0	4.9	0.0	0.0	0.0	6.5
Not Beneficial	0.0	3.7	5.3	3.7	21.1	13.0
Quite Beneficial	36.8	22.0	21.1	16.0	21.1	18.2
Beneficial	26.3	37.8	42.1	35.8	36.8	35.1
Very beneficial	36.8	31.7	31.6	44.4	21.1	27.3
Freq.	19	82	19	81	19	77

# Table 152. The distributions (%) of responses to how beneficial each possible advantage is from the professionals' perspectives.

	Reduces likelihood of DNAs		involve	proves family plvement and support		Lowers rates of infection		Lowers stress and anxiety	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not at all Beneficial	5.6	8.5	5.6	2.6	10.5	2.5	10.5	8.8	
Not Beneficial	16.7	20.7	33.3	12.8	5.3	1.2	15.8	11.3	
Quite Beneficial	27.8	25.6	27.8	29.5	10.5	11.1	42.1	36.3	
Beneficial	33.3	23.2	16.7	25.6	26.3	27.2	26.3	25.0	
Very beneficial	16.7	22.0	16.7	29.5	47.4	58.0	5.3	18.8	
Freq.	18	82	18	78	19	81	19	80	

Overall, Secondary care were more positive in their responses, having higher proportions of responses for 'very beneficial' compared with Primary care (except for improving access to care). The biggest difference between the beneficial ratings given by the two care sectors was for saving patient travel and parking, whereas the smallest difference was for reducing the likelihood of DNAs, whereby this was seen as not 'very beneficial' for both.

Considering Primary care alone, the most beneficial aspect was of VC was lowering the rates of infection, and the least beneficial was lowering stress and anxiety. For Secondary care, the most beneficial was saving patient travel and parking, and the least beneficial was also lowering stress and anxiety.

**Management and Administration**. All of the above statements were rated as 'quite beneficial', 'beneficial', or 'very beneficial' except for reducing wait times, improving family support, and reducing stress and anxiety.



#### Challenges

Professionals were asked to rate the relevancy of the challenges and how difficult this would make VC for them and for their patients, on a 4-point Likert scale, ranging from 1 ('not at all relevant') to 4 ('very relevant'). These will be considered for Primary and Secondary care, in order to see the differences (if any) between the two care sectors.

**Primary and Secondary care.** Table 153-156 display the distributions of responses for the relevancy of potential challenges and how difficult these would make VC for professionals (153 and 154) and patients (155 and 156), in Primary and Secondary care.

Table 153. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	Access to a device		No / Co	st of internet	Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	26.3	50	38.9	45.5	15.8	19.0	16.7	27.5
A little relevant	21.1	15.4	5.6	13.0	10.5	19.0	16.7	18.8
Relevant	15.8	16.7	5.6	23.4	15.8	25.3	33.3	26.3
Very Relevant	36.8	17.9	50.0	18.2	57.9	36.7	33.3	27.5
Freq.	19	78	18	77	19	79	18	80

Table 154. The distribution of relevancy ratings and how difficult the following challenges would make VC for professionals in Primary and Secondary care.

	No serv	ice support	Not appropr	iate or suitable	Lack of confidence		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	22.2	28.2	16.7	31.9	38.9	56.0	
A little relevant	16.7	34.6	22.2	27.8	11.1	21.3	
Relevant	22.2	19.2	22.2	20.8	27.8	14.7	
Very Relevant	38.9	17.9	38.9	19.4	22.2	8.0	
Freq.	18	78	18	72	18	75	



# Table 155. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Access to a device		No / Co	o / Cost of internet		Poor internet connection		Safe Space	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Not relevant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	
A little relevant	5.0	17.3	5.0	22.2	0.0	13.6	15.0	33.8	
Relevant	20.0	38.3	30.0	35.8	40.0	32.1	25.0	30.0	
Very Relevant	75.0	44.4	65.0	42.0	60.0	54.3	60.0	25.0	
Freq.	20	81	20	81	20	81	20	80	

# Table 156. The distribution of relevancy ratings and how difficult the following challenges would make VC for patients (from the professionals' perspective) in Primary and Secondary care.

	Adeque	ate support	Not appropri	iate or suitable	Lack of	confidence
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Not relevant	0.0	10.3	5.6	6.4	5.6	1.2
A little relevant	15.0	39.7	33.3	30.8	5.6	22.2
Relevant	35.0	24.4	16.7	37.2	27.8	35.8
Very Relevant	50.0	25.6	44.4	25.6	61.1	40.7
Freq.	20	78	18	74	18	81

Overall, professionals rated patients' challenges as more relevant than their own, except for access to a safe space in Secondary care, whereby professionals rated this as 'very relevant' more for themselves than patients.

In general, Primary care rated poor internet connection as the most relevant for their own difficulties, and access to a device for their patients. For Secondary care, the most relevant for professionals was also poor internet connection, for themselves and for their patients.

In terms of differences between professionals and their patients' perceptions, for both care sectors this was for having a lack of confidence, whereby this was once again more relevant for the patients (Figure 88).



# Figure 88. The distribution of relevancy ratings for having a lack of confidence introducing difficulties for VC, for patients and professionals, in Primary and Secondary care.



**Preference for FTF or TC.** In addition to the challenges above, professionals were also asked if a preference for FTF would introduce difficulties with VC for themselves and their patients. This challenge was more relevant for patients than for professionals, and Primary care also stated that this was more relevant, for both professionals (Primary care: 21.1% very relevant; Secondary care 13.3% very relevant) and their patients (Primary care: 42.1% very relevant; Secondary care: 31.6% very relevant). These findings are displayed in Figure 89.



Figure 89. The distribution of relevancy ratings for the preference of FTF or telephone introducing difficulties for VC, for patients and professionals, in Primary and Secondary care.



**Management and Administration**. The one respondent in this sector stated that VC challenges that were 'not relevant' were professional device access, internet access and connectivity, and no support. The rest were either 'relevant' or a 'little relevant' according to this respondent.

#### Statements

Sixteen different statements regarding VC were given to respondents, whereby they were to state whether they were 'true', 'false', or if they were 'unable to say'. These will be considered for Primary and Secondary care, in order to see the differences between the two care sectors.

**Primary and Secondary care.** The distributions of responses to the statements are displayed in Tables 157-160 for Primary and Secondary care.

Table 157. The distributions of responses to each of the statements rego	Irding VC in Primary and
Secondary care.	

	Regularly use VC			ment offered ice to patient	Dedicated team implementing VC		Clinicians keen to use VC	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	65.0	85.4	30.0	42.3	31.6	58.0	47.4	79.3
False	30.0	7.3	65.0	43.6	63.2	21.0	36.8	11.0
Unable to say	5.0	7.3	5.0	14.1	5.3	21.0	15.8	9.8
Freq.	20	82	20	78	19	81	19	82

### Table 158. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Management keen to use VC		Admin ke	en to use VC		quivalent to ephone	VC is equivalent to FTF	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	42.1	79.3	33.3	49.4	42.1	46.3	31.6	23.2
False	26.3	4.9	27.8	14.8	57.9	37.8	63.2	59.8
Unable to say	31.6	31.6	38.9	35.8	0.0	15.9	5.3	17.1
Freq.	19	82	18	81	19	82	19	82



### Table 159. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	Adequate support available			d adequate aining				ate equipment available	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
True	30.0	48.8	50.0	76.3	57.9	56.8	84.2	68.3	
False	35.0	28.0	27.8	12.5	36.8	24.7	15.8	20.7	
Unable to say	35.0	23.2	22.2	11.3	5.3	18.5	0.0	11.0	
Freq.	20	82	18	80	19	81	19	82	

### Table 160. The distributions of responses to each of the statements regarding VC in Primary and Secondary care.

	space	equate /rooms are ailable		o log VC in ng systems	Bookings	are set up for VC	Concerns about security have been resolved	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
True	78.9	48.8	41.2	59.7	29.4	58.0	44.4	52.6
False	15.8	37.5	41.2	15.6	64.7	24.7	16.7	16.7
Unable to say	5.3	13.8	17.6	24.7	5.9	17.3	38.9	30.8
Freq.	19	80	17	77	17	81	18	78

In Secondary care, the majority of responses to all the statements above were 'true', except for VC being the equivalent to FTF and VC being offered as a choice to the patient. Primary care, on the other hand, had a higher proportion of 'false' responses for the statements regarding appointments offered as a choice, dedicated team for implementing VC, VC being the equivalent to TC and FTF, having adequate support available, and booking systems being set up for VC. Secondary care was therefore more positive in their responses to the above statements, with a higher proportion of 'true' responses compared with Primary care to all except for having sufficient internet, and adequate equipment and space/rooms available. The largest difference between the two care sectors was for clinical colleagues being keen to use VC, whereby Secondary care had 79.3% of responses, on the other hand, was having sufficient internet connectivity (57.9% for 'true' in Primary care, and 56.9% in Secondary care).



**Management and Administration.** The following statements were responded to with 'true': using VC regularly, all colleagues are keen, VC is equivalent to telephone, adequate support is available, having sufficient internet, booking systems are set up, and cyber security concerns have been resolved.

#### Summary of SBUHB

The analysis of the data revealed some interesting findings in terms of professionals' opinions, resulting from asking them to reflect on their previous experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding their use of VC, even when faced with the potential challenges.

The majority of professionals in SBUHB felt that VC should be used when it is appropriate, with some professionals exhibiting a level of uncertainty regarding this idea. There was only a very small proportion of professionals that believed it should not be used entirely. For the care sectors, particularly, a more positive response was observed for Secondary care than for Primary care, suggesting that even if professionals not entirely sure whether it should be used, the vast majority believe that the idea of it should not be rejected. In addition, when asked to consider their department/service's usage of VC, the professionals identified that their usage was halfway between "ad hoc" and "widespread". This implies that professionals' usage within SBUHB is more than just when VC is needed but is used more routinely as part of their service, a positive response. It was also evident that Secondary care reported more wide usage of VC in comparison to Primary care, whereby their usage was more towards only when necessary, identifying a gap to fill for Primary care professionals.

Overall, professionals in SBUHB rated VC positively and beneficial for the potential outcomes. Secondary care was revealed to be more positive in their responses for the majority of the benefits, however all care sectors still exhibited positive opinions regarding VC. In particular, VC was seen to benefit the patient, in that it allowed for a reduction in the time taken to travel (and park)



to and from their appointments, as well as reducing the risks of viral transmission. On the other hand, although receiving positive responses on the whole, VC was not as beneficial for other aspects, such as reducing DNA rates.

Moving on and considering the difficulties with VC, professionals viewed the potential challenges to be more relevant in introducing difficulties for patients than themselves, such as lacking confidence, although respondents' technological issues were still highlighted. For instance, poor internet connectivity and troubles accessing devices. Overall, these findings highlight the lower rated aspects of VC are typically perceived from a technological perspective and could be seen amongst both Primary and Secondary care professionals.

Finally, respondents were given a series of statements to capture an idea of their perceptions of VC. It was revealed that large proportions of respondents were regularly using VC, their colleagues were keen to make use (including Management and other professionals), and that they had received adequate training to enable them to use VC. On the other hand, professionals were not happy to say that VC was the equivalent to FTF, which suggests that VC does not fully replace or fulfils the needs of professionals as FTF does. Furthermore, there were many respondents that stated they did not have access to sufficient space to conduct VC, or internet connectivity. These areas also emerged as particularly difficult for Secondary care, with high numbers of 'false' responses for these statements. This suggests that Secondary care professionals may experience difficulties with VC due to a lack of availability of adequate resources. Management and Administration also responded positively, except for, once again, VC being the equivalent to FTF.

In summary, the responses in SBUHB were generally positive, and there were small differences between Primary and Secondary care, although Secondary care professionals seemed slightly more positive than Primary. These findings



suggest that VC is accepted amongst professionals, allowing the use of VC to continue within their departments or services. Regardless of the challenges faced, such as barriers to accessing healthcare in specific circumstances, VC is implied to be positively perceived by these professionals.


# Qualitative Data of Retrospective Survey

This section of the chapter provides an overview of the professionals' perspectives and experiences of VC that were reported in the narrative boxes within the retrospective survey. The section is split up into five dominant themes, with sub-dominant categories. The dominant themes include the 'use and value of VC', 'the benefits of VC', 'the challenges of VC' 'sustainability of VC' and 'stories of VC'. Direct quotes within the themes are referenced with the specific Health Board, and the professional's occupation (if provided).

### Theme 1: VC 'Use & Value' in Wales Video Consulting in Wales

In general, the professionals across all of the Health Boards and care sectors had a positive regard towards the use of VC as a way to deliver health and social care appointments in Wales. There were a wide range of reasons to support their preference for (or against) VC. These are divided into subcategories to include: flexibility; clinical suitability; observations; accessibility and independence; and clinical reservations and uncertainty.

# Flexibility of Video Consulting

The use and value of VC was reported by many professionals to offer improved flexibility of care in comparison to FTF. This was observed as an important factor as to why many professionals perceive VC to be of use and value for managing their own caseloads and offering patient care.

### As one GP states, VC allows for patient flexibility;

"Working professionals not having to leave work to attend appointments" (GP Doctor, Aneurin Bevan UHB).

In addition, a Psychiatric Nurse & a Respiratory Nurse both state that the use of VC means that;



"Appointment times can be more flexible to suit the patient's needs" (Psychiatry Nurse, Hywel Dda UHB)

"[VC] offers the patient and health system flexibility" (Respiratory medicine Nurse, Hywel Dda UHB).

# This enhanced flexibility is reported to allow for patient care to fit into both the patient and professionals' daily lives;

"It can be more convenient for patients of working age, as they can access appointments whilst in work" (Neurology Nurse, Cwm Taf Morgannwg UHB).

"[VC] makes it easier for professionals and patients to access, as the times can be more flexible" (Mental Health Nurse, Aneurin Bevan UHB)

"VC can be flexible for patients and staff" (Outpatient Dietician, Swansea Bay UHB).

# Clinical Suitability

Clinical suitability was regularly reported within the data, with some professionals considering VC as not clinically suitable, whereas others consider it more clinically suitable. An example of a non-suitable appointment is described for autism spectrum disorders (ASD), in that ASD can be complex, and an offer of VC may not be as straightforward for these individuals as with others.

"It may not always be appropriate as well. My autistic son attended a couple of OT meetings like this and struggled to stay focused as it was not an official appointment in clinic...was distracted by what he was doing prior to the video call" (Psychologist, Cwm Taf Morgannwg UHB).

### On the other hand, VC is reported to be more clinically suitable and accessible

#### for some patients;

"In some circumstances, video consulting can be essential, particularly with the autistic people that our service supports who are extremely anxious to leave their house" (Occupational Therapist Technician, Aneurin Bevan UHB).



It was also noted that whilst some health conditions are more difficult than others, there were clear examples of suitable patient types, such as those who experience anxiety around leaving home and/or worried about getting to hospital.

"While some conditions are very difficult to assess on video and can cause frustration, but if patients have anxiety regarding attending appointments/hospital, video can be very useful" (Physiotherapist, Hywel Dda UHB).

"Patients have reported they often feel stressed when coming into hospital for appointments and since we have been using the online platforms for clinics, they feel much more able to attend and engage with the appointment" (Pain Management Nurse, Cardiff and Vale UHB).

VC is also reported to improve patient care for aspects, such as reducing stress and anxiety levels, which results in positive patient feedback regarding their experience;

"Feedback I have had so far has been positive with patients who have reported feeling anxious to start with but the overall experience was positive, and they chose to use it again over a telephone consult" (Rehabilitation Psychologist, Betsi Cadwaladr UHB).

"Can initially increase anxiety in patients as they have to learn how to log in. Once resolved then reduces anxiety and stress" (unknown, Aneurin Bevan UHB).

"Stress and anxiety can increase for patients to begin with, but the result of a successful call can lower this significantly" (Speech and Language Therapist, Aneurin Bevan UHB).

#### Observing Patients in their Own Environment

The use and value of VC was also expressed in the professionals' ability to be able to observe their patients in their own environments, which in many ways delivered better health and social care, particularly for younger patients.



"Patients are more relaxed in their home environment" (Speech and language therapist, Betsi Cadwaladr UHB).

"Enables patients to stay home and feel comfortable in their home environment" (Dietician, Aneurin Bevan UHB).

"Video consultations have enabled Children's SLT [Speech & Language Therapy] to observe the child and family in their home environment...able to see the child's speech, language and communication in a setting in which they are familiar and comfortable" (Speech and language therapist, Powys Teaching HB).

"Helpful for young people" (Psychologist, Betsi Cadwaladr UHB).

"Young persons are very familiar with using video calls anyway. They can be more open in this environment if familiar" (Psychologist, Hywel Dda UHB).

#### A Social Worker from Betsi Cadwaladr UHB, however, states that:

"Young people feel challenged by video calls and prefer the anonymity of telephone calls. However, in a normal clinical setting we would be seeing them F2F which they would probably also find difficult" (Social Worker, Betsi Cadwaladr UHB)

This may suggest that it is not always the concept of VC patients have challenges with, rather the utilisation of any clinical contact that may be problematic for such patients.

#### Independent Care of Younger Patients

In addition, professionals report other advantages for their younger patients, such as improved accessibility for 'tech-savvy' patients, encouraging independent care.

"Being able to provide video consultation means that young people can easily access the service" (Psychologist, Betsi Cadwaladr UHB).

"Very beneficial for patients who are tech savvy" (Cardiology Nurse, Betsi Cadwaladr UHB).

"Lots of young people have been more able to attend appointments independently which they perceive as being a positive outcome" (Psychiatry Nurse, Cardiff and Vale UHB).

"Useful for straight forward problems in younger patients" (GP Doctor, Betsi Cadwaladr UHB).

"Benefit to the patient only if they are computer literate and tech savvy" (Practice Manager, Cardiff and Vale UHB).

# Clinical Reservations & Uncertainty

From the quantitative analysis of this survey, it demonstrates that almost 20% of professionals believe that VC should 'maybe' be used for health and social care appointments where possible.

# Professionals here state that;

"Video consulting should be used in conjunction with F2F" (Psychiatry nurse, Swansea Bay UHB)

### And should not;

"Replace hands on examination when safe and possible to do so" (GP doctor, Cwm Taf Morgannwg UHB).

### And perhaps VC should be used intermittently;

"... A one-off appointment or quarterly F2F if care is ongoing would be ideal too" (Psychologist, Powys Teaching HB).

# It was however expressed that VC should be sustained into long-term delivery of health and social care as a permanent addition to FTF.

"[VC] should continue to be used forever, however I do not think it should replace F2F consultations, we should use video consulting as an option where no physical examination or blood test is required" (Support Worker, Powys Teaching HB).

And that a professional and patient preference to use VC or not to use VC would be an ideal model of care.



"Preference would always have to be F2F appointments but when unable to do this then a video consultation should be used" (Physiotherapist, Betsi Cadwaladr UHB).

# Theme 2: Benefits of Video Consulting

#### Time & Travel Savings

It was reported by a large proportion of professionals that there have been significant savings in time and travel, and therefore regarded as a positive benefit for both the professional and the patient when using VC. Nevertheless, more emphasis was placed on the significant time and travel savings VC has for patients.

"Saves travel time, especially for families with other children, saves professionals travel time" (Occupational Therapist, Aneurin Bevan UHB).

"Reduces burden of travel on patients and clients" (Nurse, Betsi Cadwaladr UHB).

"It is convenient for patients saving travel" (Oral Maxillo Facial Doctor, Betsi Cadwaladr UHB).

"This saves time and travel for many patients and reduces footfall on hospital sites" (Physiotherapist, Swansea Bay UHB).

"Reduces the need for patients to travel long distances to appointments" (Management Primary Care, Betsi Cadwaladr UHB).

The savings associated with patient time and travel were also noted as an additional benefit for those patients with difficulty in leaving their homes due to mobility issues or psychological and neurological disorders that made this challenging for them.

"Those with social anxiety, mobility problems able to access our service for the first time" (Psychiatry Administrator, Powys Teaching HB).

"Allows for patients with mobility issues and/or limited access to transportation to attend with ease" (Psychologist, Swansea Bay UHB).

"Accessibility for patients- specifically those with mobility or anxiety issues" (Psychiatry Nurse, Aneurin Bevan UHB).

"Social interaction and communication can be very anxiety provoking for the autistic community. Video calls can reduce this anxiety" (Wellbeing Support Worker Integrated Autism Service, Swansea Bay UHB).

"VC can be much more informative than a telephone consultation particularly for mental health problems, a lot of visual medical problems and social care situations" (Management GP, Aneurin Bevan UHB).

"I have clients who prefer virtual appointments and like the convenience of this" (Psychiatry Nurse, Powys Teaching HB).

#### Environmental Benefits

There were also many benefits expressed regarding the environment in a move away from FTF consultations.

"I advocate for environmental issues and agree that for various reasons (paper waste, petrol, etc.) that video calls are more environmentally friendly than face-to-face...big thumbs up!" (Trainee Psychologist, Aneurin Bevan UHB.

"True that there is less impact on the environment, with less travel" (Palliative Medicine Doctor, Swansea Bay UHB).

### Work-Life Balance & Joined Up Working

Many of the responding professionals identified a range of benefits that they considered, specifically for themselves when using VC, including improved work/life balance, enhanced Multi-Disciplinary Team meetings (MDTs) and increased performance and flexibility of consultations.

"Improved work-life balance- able to work from home more as a result...can better time appointments" (Paediatrics Pharmacist, Hywel Dda UHB).

"Allows for more flexibility in working day" (Mental Health Counsellor, Cardiff and Vale UHB).

"More efficient and direct referrals within the MDT virtual clinic" (Genitourinary Medicine Doctor, Betsi Cadwaladr UHB).



"Enables teams from across the Health Board to communicate better, more frequently, with more of the team present (virtually) (Dietician, Aneurin Bevan UHB).

A GP Doctor also reports the combined benefits of joined up working, benefiting themselves, the patient and family members.

"3-way teams meeting (professional + patient + family)" (GP Doctor, Betsi Cadwaladr UHB).

# In addition to this, joined up working also highlighted the possibility of improved interactions for both professionals and patients with wider family involvement;

"Does provide the opportunity for a second parent who may be working to be present and improve communication with both" (Physiotherapist, Betsi Cadwaladr UHB).

"Beneficial if it can involve family who would not normally be available in person" (Speech and Language Therapist, Powys Teaching HB).

### And the ability to enhance communication with their patients;

"Allows patients to contact back with own measurements and photos" (GP Doctor, Betsi Cadwaladr UHB).

"Adds another flexible option for patient follow up" (Renal Medicine Nurse, Betsi Cadwaladr UHB).

#### Lowered DNAs & Freeing up Services

There were also other types of benefits mentioned within the data, such as that of improved access to services, lowered rates of DNAs and the freeing up services. For example, this was an important aspect to a GP surgery in Betsi Cadwaladr UHB, as it allowed other patients to still be able to call in to surgery and reduce hold times.

"Allows more free telephone lines when booking appointments" (GP Doctor, HB unknown).



"I have observed lower rates of DNAs when conducting video calls vs. face-to-face appointments" (Trainee Psychologist, Aneurin Bevan UHB).

"They [patients] love the ease of it and I have had no DNAs since this has been used" (Mental Health Psychotherapist, Powys Teaching HB).

#### Infection Control & COVID-19

The most prominent benefit reported within the data was the impact of the COVID-19 pandemic on health and social care appointments and how deeply professionals expressed their gratitude for the use of VC. It was commonly reported that VC played a significant role in allowing professionals to continue delivering health and social care, whilst at the same time protecting both themselves, their colleagues and patients from infection.

"Prevent[s] footfall into the surgery during the pandemic" (GP Doctor, Cardiff and Vale UHB).

"Reduces infection spread" (Psychologist, Powys Teaching HB).

"COVID has not only restricted the number of patients we can have in the practice at one time, but also stopped patients wanting to attend as they did before" (Administrator GP, Hywel Dda UHB).

"With the current restrictions, there is definitely a place for video consultations in certain circumstances" (Rheumatology Doctor, ABUHB).

"As a staff member who has had to shield and work from home-video consulting has enabled me to continue to support and provide intervention to my patients" (OT Cardiology, Cwm Taf Morgannwg UHB).

"Minimising physical contacts where possible during the current pandemic is sensible" (Primary Care Doctor, Aneurin Bevan UHB).

"Also allows for review of patients receiving palliative care without increasing the risk of COVID due to face to face contacts" (GP Doctor, Hywel Dda UHB).

"Allows the patient to be seen which is important in our line of work when we need to see the mother and baby interaction but are unable to home visit due to COVID" (Perinatal Nurse, Hywel Dda UHB). "In this unprecedented time of pandemic, it has been invaluable in ensuring appropriate safeguarding measures are put in place in a timely fashion" (Genitourinary Medicine Nurse, Cardiff and Vale UHB).

"I was shielding and continue to be vulnerable, so this enables me to work much more safely" (Psychiatry Doctor, Aneurin Bevan UHB).

# Theme 3: Challenges Using Video Consulting

Despite that VC is generally conveyed with a positive regard, it is also reported throughout to have associated challenges.

#### Professional Difficulties

Some of the professionals report VC to be difficult for certain services to carry out their typical delivery of health care. This was particularly relevant in services that required more 'hands on' healthcare delivery, such as Physiotherapy.

"It can be difficult with my profession as a physio as assessments require handling" (Paediatrics Physiotherapist, Cardiff and Vale UHB).

"A lot of physic input requires physical presence" (Physiotherapist, Aneurin Bevan UHB).

Furthermore, professionals express eventualities where VC did not work as intended, and were required to revert back to other forms of consultation.

"[VC] can be useful if giving advice for an initial appointment but often the video is glitchy which results in a reduced ability to assess" (no reference available)

"We used it initially but found that picture quality (over and above a good photograph) meant that it added little if anything to a telephone consult" (GP Doctor, Betsi Cadwaladr UHB).

One professional mentioned their difficulty in setting up the technology and felt that this process was not within the typical delivery of care for a GP Doctor.

"The actual consultation I am happy with, but the arranging and setting up of appointments is not efficient or effective" (GP Doctor, Hywel Dda UHB).

### Patient Difficulties

Interestingly, professionals report more perceived difficulties for their patients than they do for themselves. However, professionals note that difficulties for patients are generally situation specific (for example, where in Wales they live) and can depend on each patient's own abilities and experience (such as with using technology).

"Some of my patients live in rural areas with poor internet signal, or they simply do not have a computer or phone to access virtual meetings" (Psychiatry Nurse, Powys Teaching HB).

"Parts of the Health Board catchment area have poor broadband capacity, and I have had one patient who has had to turn off all other computer equipment to enable activity" (Palliative Medicine Doctor, Swansea Bay UHB).

"The demographic of our patients means many do not have adequate internet to support a good connection. However, most do have access to a device of some kind and internet. Most also feel confident using the video call platform. Some also do not have confidential space at home, though this varies hugely from person to person" (Psychologist, Aneurin Bevan UHB).

"For most patients it is excellent, older adults and those without English as a first language find it harder" (Doctor, Cardiff and Vale UHB).

### There is huge variability among patient populations;

"Huge variability" (GP Doctor, Hywel Dda UHB) amongst patient experiences with video consulting.

"These are problems that COULD occur- everyone is different! (Psychologist, Betsi Cadwaladr UHB).

"Some patients struggle with the technology but most cope OK" (GP Doctor, Cardiff and Vale UHB).



"Most patients have liked it and have been able to use it" (GP Doctor, Swansea Bay UHB).

"It would depend on the population served. In primary care, working adult group, specific to Veterans NHS Wales, most clients have access to equipment and appreciate saving travelling, parking, childcare etc. costs" (Counsellor, Cwm Taf Morgannwg UHB and Swansea Bay UHB).

"I have only had a small number of patients who did not have appropriate equipment, and a few had no confidential space in which to engage" (Genitourinary Medicine Nurse, Cardiff and Vale UHB).

# Other professionals report difficulties among specific patient demographic groups, such as challenges engaging with older patients;

"[VC] should not be relied on as some people, especially older people, may not have access to or understanding of the necessary technology" (Psychologist, Cwm Taf Morgannwg UHB).

"[It] can be difficult to get patients who are older to engage with the technology" (Prosthetist, Cardiff and Value UHB).

"Working with a very elderly demographic, many do not know how to use tablets, smartphones or PC, [they] prefer telephone" (Domiciliary Optometrist, HB unknown).

Despite these reported difficulties, professionals also noted that many of their patients have started to overcome the problems by equipping themselves with the required resources and have even gained the relevant skills for VC as an added benefit. For example, it is stated that patients are now embracing the change to digital care;

"Patients are getting used to them-surprising how even older people's IT skills have up-scaled during the pandemic" (GP Doctor, Betsi Cadwaladr UHB).

"A lot of patients are adamant that they would prefer face-to-face, but once they have tried video consulting and they are enjoying it" (Psychotherapist, Powys Teaching HB).



"[Despite] unpredictable internet speeds...patients have managed to follow the instructions and engagement with the process has been positive" (Physiotherapist, Betsi Cadwaladr UHB).

"Most prefer face-to-face or telephone but once used video they love it" (Respiration Medicine Nurse, Aneurin Bevan UHB).

#### Improvements Needed

Many of the professionals from across all Health Boards report the need for improvements with access to better and more up-to-date technology, stable WIFI connections and greater levels of accessibility are needed for VC to increase the uptake, and improve the outcomes and benefits.

"I do not have an NHS laptop and what could be so brilliant is actually just one complex hell of a problem!" (Adult Mental Health Psychologist, Hywel Dda UHB).

"Lack of equipment and internet provided can cause great stress...there is no WIFI and limited internet ports so not everyone can have a PC at the same time" (Psychologist, Aneurin Bevan UHB).

"Many do not have suitable office space/desk space" (Physiotherapist, Swansea Bay UHB).

"Often depends upon the IT set up of the patient and family. If they have good IT equipment and connection it can work well". (Dietician, Aneurin Bevan UHB).

# It is also acknowledged that digital exclusion requires more attention to ensure VC is accessible to all.

"Digital exclusion must be considered" (GP Doctor, Aneurin Bevan UHB).

"Tends to exclude those without access to technology needed" (GP Doctor, Betsi Cadwaladr UHB).



# Theme 4: Sustainability of Video Consulting Future Use & Value of VC

Overall, VC has been widely acknowledged as a useful, valuable and beneficial asset to the delivery of health and social care in Wales; although, simultaneously it is recognised to have its many challenges.

Interestingly, despite these challenges, the majority of professionals perceive the benefits of VC to outweigh the difficulties in more situations than not.

"We would definitely prefer face to face but have to accept the situation we are in and that the benefits can outweigh difficulties" (Learning Disability Nurse, Powys Teaching HB).

This is strongly supported by many of the positive feedback responses provided by a wide range of professionals;

### Some of which express gratitude and admiration of VC platforms;

"Video consulting is valuable and we are grateful to have it" (GP Doctor, Cardiff & Vale UHB)

"Love video consulting, long may it continue". (Speech and Language Therapist, Aneurin Bevan UHB).

"Patients love it!" (MH Psychotherapist, Powys Teaching HB)

"[It]... is so much more than a video consulting program and the benefits of this are MASSIVE" (Doctor, Betsi Cadwaladr, UHB).

"Video consulting is more in line with 21<sup>st</sup> century ways of working" (GP Doctor, Aneurin Bevan UHB)

"[It] is providing an excellent alternative" (Physiotherapist, Swansea Bay UHB).

"Patients that have used the video consultation have agreed that it has been useful and have benefitted from the video calls" (Renal Medicine Nurse, Betsi Cadwaladr UHB).

"Happy to video consult and have good structure in place to support this" (Psychiatry Nurse, Aneurin Bevan UHB).



"We hope that with more positive publicity, patients will embrace". (Dietician, Powys Teaching HB)

# Others discuss their experience of VC as a valuable and beneficial addition to their work;

"As a health professional I have thoroughly embraced video consultation and see the added benefits for both patients and staff" (Renal Medicine Nurse, Betsi Cadwaladr UHB).

"We have had staff who given a choice, would prefer to do a face-toface consultation but when they have done a virtual consultation they have been surprised at how well it has gone" (Speech and Language Therapist, Cardiff and Vale UHB).

"At the moment access to device/internet is not a concern. Availability of quiet areas within the HB is necessary to allow sensitive conversations without distractions. We have that within our department. Support services have been excellent, but rarely required to enable consultations" (Palliative Medicine Doctor, Swansea Bay UHB).

"My service has been very proactive in using and getting facilities to use video call" (Physiotherapist, Aneurin Bevan UHB).

"Video is providing an alternative model of care" (Doctor, Swansea Bay UHB)

"We have set up a room within our department and we have support to run the clinics and is all working well at present. As everyone is exposed to it more, confidence will increase, and it will soon become the 'normal'" (Administration Pain Management, Betsi Cadwaladr UHB).

"I have the right equipment and it has been working well for me and getting good feedback from patients that are willing to do the video calls. My confidence with technology was low but I have found it easy to use and very effective" (Occupational Therapist, Betsi Cadwaladr, UHB).

"For some types of intervention, assessment or one-off sessions, video calling is a great benefit" (Psychologist, Aneurin Bevan UHB).



Some professionals express their desire for VC to continue, but also their concerns about the future when VC expands, such as the need for more space and resources.

"We have been able to find the equipment, rooms etc., to use however as we roll out the video clinics further we may have difficulties in locating enough rooms for each clinic..." (Pain Management Nurse, Betsi Cadwaladr UHB).

"Space is at a premium within our department due to social distancing and COVID protocols. This is not a problem unique to video consults, is also an issue for running phone and face-to-face clinics." (Paediatrics Doctor, Betsi Cadwaladr UHB).

# However, there are a few that consider VC as a short-term solution, and don't perceive it being used much in the future.

"For therapy or any more in-depth connection/relationship interventions, it does not seem to be effective any longer term than a month or two" (Psychologist, Aneurin Bevan UHB).

"It has its place, but it would not be something I would want to do full time as my job is active not desk based primarily" (Physiotherapist, Betsi Cadwaladr UHB).

"I am not able to assess the children and give advice as well as seeing them at home, but it is an alternative in the short term if I cannot visit" (Child Development Advisor, Aneurin Bevan UHB).

#### Theme 5: Case Studies & Stories of VC

Many professionals shared interesting stories about their use, value, benefits and challenges of VC which is condensed into short case stories below. Those professionals who reported stories all had positive comments about using VC.

### Consulting with Patients Abroad

Many professionals were able to conduct VC whilst their patients were abroad;



"Able to contact patients abroad if they have been working there" (Renal Medicine Nurse, Betsi Cadwaladr UHB).

"Certain patients affected by local lockdown measures while abroad were able to attend their scheduled follow up appointments" (unknown).

"I had a consultation today (routine appointment) with a patient on holiday elsewhere in Europe- worked very well" (Doctor, Cardiff and Vale UHB).

"One of my patients travels to Spain every 3 months for several months. Therefore I have undertaken video consultation with them during his stay there" (Parkinson's Disease Nurse Specialist, Cwm Taf Morgannwg UHB).

# VC was also considered beneficial for families who live in different parts of the country or world. The following professionals shared their stories;

"My patients have family living away, so they are able to join in the consultation which is absolutely fantastic" (Cardiology Nurse, Betsi Cadwaladr UHB).

"How it enabled family support for bi-lingual patient when daughter lives 100 miles away she was able to translate for us in a way her father the patient could understand and engage in therapy" (Speech and Language Therapist, Neurology, Aneurin Bevan UHB).

"We have carried out family discharge planning meeting for stroke patients and their families. The virtual platform enabled family members to attend from across the UK without travelling" (Occupational Therapist, Neurology, Hywel Dda UHB).

"We were able to use the Attend Anywhere platform to review an elderly patient to save them attending clinic, and with the patient's consent their family member was also able to join the call from abroad" (Medical Secretary Geriatric Medicine, Hywel Dda UHB).

#### Therapy Sessions

Professionals also reported stories relating to some interesting techniques in therapy sessions through the use of VC.

"Recently successfully used 'chair work' with client. This involved swapping chairs in their front room in order to develop a dialogue



between different parts of themselves. It worked very well even with video conferencing" (CBT Therapist, Hywel Dda UHB).

"I am developing online art therapy with adults with a LD [learning disability], there are many keen learning points as I develop this practice" (Art Therapist, Aneurin Bevan UHB).

#### Help Build Rapport

Professionals also told stories of how VC had helped them build rapport with their patients in fun and slightly unconventional ways.

"I arrange appointments with clients and often help them set up the link on their devices. I think this is a positive interaction with clients and an opportunity to develop a rapport, and often have a bit of fun (Administrator Mental Health, Powys Teaching HB).

"Several patients have attended their virtual appointments and given a lovely view of their partners snoozing in the corner or coving on the ceiling as they have switched the wrong camera on...it has given us all a chuckle and broken the ice...one lovely lady also told me I had the face for radio not TV" (Audiologist, Swansea Bay UHB).

#### Reassurance during the Pandemic

At such a difficult time in everybody's lives due to the pandemic, some professionals tell stories of how pleased and reassured their patients were to see a friendly face; and the additional benefits home comforts (e.g., pets) can have on patients.

"During lockdown patients were so pleased to see our faces online and be reassured knowing the service is still available to them. They found the online video a better experience than a phone call as having a visual of the professional made it more real to them" (Respiratory Medicine Nurse, Powys Teaching HB).

"As I manage mostly children, there have been very long consultations when I have been introduced to all the pets in the house one by one as the little girl has taken the phone during a video consultation. I have also noticed the odd child who may have multiple surgeries and sometimes nervous in a hospital clinic being much more relaxed and happy chatting to me in the safety of their home" (Plastic Surgery Doctor, Swansea Bay UHB).



"Shielding during COVID were very grateful to see a face. Have been introduced to entire families and pets" (Anaesthetist Doctor, Aneurin Bevan UHB).

Another professional expresses how comfortable their patient was with VC, and how they had their eyes opened to the difficulties some patients experience with FTF appointments.

"My client said she preferred this way and it actually meant she felt more comfortable when she met me again. Virtual meant there was no pressure for eye contact which she struggles with and she was able to have her dog who is a form of therapy animal, which made her feel a lot more comfortable. The sessions were a lot more enjoyable and worthwhile. I would never had thought of offering virtual meetings as it is not something the service had ever thought of before, but it has opened my eyes up to how difficult some of my other clients may have found meeting me face to face" (Autism Specialist Practitioner, Powys Teaching HB).

Pandemic stories were not uncommon within this survey. This professional tells of a pandemic story whereby their patient dressed for the first time in months purposely for the VC call;

"Client had not got changed for many months during lockdown, as she knew I would be seeing her by video she got changed for the first time" (Occupational Therapist, Betsi Cadwaladr UHB).

### A similar pandemic-related story was told by the following professional;

"Client had become low in mood and lethargic during lockdown (over 4 months) had neglected her self-care, not getting dressed staying in her nightwear. We had been having regular phone calls to encourage her to tend to her self-care, however it was the video call that prompted her to get dressed knowing I would be able to see her. She moved the camera up and down to show me that she had dressed for the first time in 4 months" (Occupational Therapist Mental Health, Betsi Cadwaladr UHB).



# Discussion of Chapter

The analysis of the data within this chapter revealed some interesting findings in terms of professionals' opinions, resulting from asking them to reflect on their previous experiences with using VC. Overall, the responses were positive, and professionals expressed optimistic views regarding the use, value and benefit of VC, even when faced with challenges they reported to encounter on specific occasions.

The professionals report, for the majority, that VC should be used where it is deemed appropriate. There were very low numbers of responses for the complete non-utilisation of VC (1%), which suggests that even if professionals are not entirely sure whether it should be used, the vast majority believe it should not be entirely discarded as an option within health and social care services. In support of this, the qualitative data revealed that VC should be implemented in addition to FTF consultations, and that it should not act as a replacement of FTF. Thus, perhaps incorporating VC and FTF appointments into services could prove useful in increasing accessibility to care and reducing the associated challenges. For the small number of professionals that responded 'no' to whether VC should be used, they may have perceived any benefit to VC as being something that TC cannot offer already, or this could have been a result of not having sufficient access to the correct technology, as revealed by the qualitative data. A number these professionals also viewed VC as a short-term solution, and that it cannot act as a replacement further than the current situation of COVID-19.

Considering the individual care sectors, Primary and Secondary care were very similar in their responses given, where the majority (approximately 80%) would consider using VC where appropriate. As before, there was a very small proportion of respondents who stated that it should not be used, in both care sectors. Although a small number of respondents in Community care, the majority still responded that it should be used, and this was also seen amongst



Management and Administration respondents. Thus, it is clear that professionals across all care sectors believe that VC should be used where it is appropriate.

In addition, a question was provided to respondents to measure their perceived usage of VC within their department or service, along a scale ranging from ad hoc (only when necessary) to widespread (routinely used). On average, professionals across Wales believe their use to be exactly between ad hoc and widespread, meaning that VC is not only used when necessary, however its usage is still not widespread within services. This suggests there is room for professionals to enhance their usage of VC, and for teams to encourage this.

According to the data regarding platform usage, the most common platform being used by professionals was 'Attend Anywhere' (1000 professionals). The second most common platform was 'Microsoft Teams', followed by 'Skype', and 'AccuRx'. Other platforms being used included 'Webex', 'Zoom', and 'WhatsApp'. Particularly, for 35 professionals, VC was not applicable to them as they were using only TC, perhaps suggesting that VC is not yet available to or accepted by all professionals across Wales.

Moving on, professionals were given a series of benefits of VC, and were asked to rate how beneficial it was in terms of these, with additional written responses to open-ended questions, asking for professionals' comments. The findings here revealed that VC was perceived to be beneficial across all of the proposed aspects, except for reducing stress and anxiety and reducing the likelihood of DNAs, whereby the responses were slightly more negative. However, although these were rated less beneficial than the other aspects of VC, they were still perceived to be beneficial by professionals, overall (approximately half of the respondents). This implies that VC does not aid in reducing levels of stress and anxiety experienced for all professionals or their



patients, and also may not improve the levels of patients who do not attend their appointments, as the option is still there to not log on and participate. Interestingly, the qualitative data revealed a large proportion of narrative to support the benefit of reduced DNAs, with some professionals stating they have had no DNAs since the implementation of VC. Similarly, this was supported for reduced stress and anxiety in patients also, with many professionals demonstrating VC as an improved method of care for such patients.

The most positively rated benefit was saving time, travel and parking for the patient, with VC reducing the need to travel to and from hospital and clinic settings for appointments. In support of this, the qualitative analysis revealed that saving travel time for the patient was useful, especially for those who exhibit difficulties with leaving their homes. This includes individuals who exhibited psychological, neurological and physical disorders. To add to this, the lack of travel introduces environmental benefits, suggesting that VC is more environmentally friendly than FTF.

Furthermore, VC also makes appointments more available and increases the accessibility for those with specific disorders, such as ASD, and different ages of patients that may find difficulty with FTF (for example, adolescents). It also increases the accessibility to what are referred to in the data as "tech savvy" or younger individuals, allowing them to attend their appointments and take a more independent role in their care. A further benefit of VC evidenced by the open-ended responses was the ability for professionals to observe patients in their own environments, particularly useful for those in children and young person services. The use of VC also had sole benefits for professionals, improving work-life balance, increasing flexibility, and improving communication between different teams.



Accounting for differences between the care sectors, specifically Primary and Secondary care, Secondary care were, on average, more positive in their responses for all possible benefits, except for reducing the likelihood of DNAs. The largest difference between the two care sectors was for lowering the rates of infection. Regardless of this, remaining responses were very similar between the two. It is interesting that Primary care do not view VC as beneficial for lowering the rates of infection as Secondary care does, perhaps this is because FTF is prevented on less occasions for Primary care professionals, or perhaps they are conducting fewer VC appointments, although this is simply speculation.

In addition to the benefits of VC, eight different challenges were proposed to professionals that could introduce difficulties when using VC for themselves and their patients. They were asked to rate the relevancy of these individual challenges, as well as providing any comments or thoughts about these. In general, the challenges were more relevant for patients than for the professionals. For instance, there were large differences between respondents' challenges and their perceptions of patients' for having access to a device, internet accessibility and connection, and having a lack of confidence, whereby these were more relevant for introducing difficulties with patients' experiences. Furthermore, the preference for FTF was a relevant challenge for both patients and professionals, although it was evident that this was rated lower for patients. Perhaps this challenge needs to be addressed, supporting the previously mentioned suggestion that FTF and VC are implemented together, so that professionals and patients can make the choice of when FTF is appropriate based on clinical judgement and patients' situation and experiences.

Considering the qualitative data, difficulties with technology emerged, supporting the idea that professionals and their patients encounter technological restraints that impact on their experience with VC. One factor



that was seen to influence subjective difficulties was the demographics of patients, such that technology introduces problems with engagement for older or elderly individuals, who may not be as "tech savvy" as the younger generation. However, the difficulties with technology were very specific and were not exhibited across all professionals, with most expressing positive experiences with their platforms and VC in general. The benefits of VC seemed to outweigh the difficulties, as reported by respondents, and more support is simply needed to help with adjustment and long-term implementation of VC. In support of this, professionals report that despite these issues with technology being present, patients have been able to engage and follow instructions adequately. It is noted that huge variability exists between patients, and that every situation is different, difficulties with VC are very specific to patients' circumstances, such as living in rural areas. These individuals are adapting to the change and overcoming the problems associated with the shift from traditional FTF health and social care, to a more digital and innovative method, such as VC.

Primary and Secondary care were similar in the relevancy ratings given for the possible challenges faced with VC. The largest difference, however, between the care sectors was for patients' access to a device, being more relevant within Primary care, although this was still highly relevant for Secondary care as well. Both observed patient challenges as more relevant than their own. Thus, these findings suggest that Primary and Secondary care are similar in their views of the relevant challenges associated with VC. For Community care, the professionals' challenges were not very relevant for introducing difficulties, however, patient challenges were once again more relevant. For patients, having access to a device was the most relevant in introducing difficulties and challenges with VC.

Finally, sixteen statements regarding VC were given to respondents, and they were asked to respond whether these were 'true' or 'false'. Overall, once



again, the findings were positive. For instance, the majority of professionals stated that they are regularly using VC, that their colleagues are keen to use VC, such as management and other professionals, and that they had received adequate training. However, there were fairly large numbers of 'false' responses for having sufficient internet connectivity, adequate equipment, and adequate space or rooms available, possibly suggesting that professionals require more support in this area, and access to equipment and improving connectivity to increase the uptake, outcomes and benefits of VC in Wales.

Furthermore, professionals also gave lower ratings for VC being the equivalent to TC, but this was even more evident for VC being the equivalent to FTF, with over half of professionals stating 'false' to this statement. Although VC has been implemented within services and departments, this does not mean VC is perceived to be the same as FTF or even TC. These results support those mentioned above, in that VC is not a replacement to FTF, but rather an addition to health and social care, and that technological difficulties can introduce barriers for some professionals, but not for all.

Interestingly, there were notable differences between Primary and Secondary care on the responses given to the statements, in that Secondary care had a higher proportion of 'true' responses for the majority of statements. For instance, Secondary care professionals were using VC regularly more than Primary, their colleagues are keen to use VC, and systems are set up for the use of VC. On the contrary, Primary care were more positive in having adequate support, equipment, and sufficient internet connectivity. Perhaps this implies that Secondary care do not have access to adequate resources and support needed for VC to be successful, and that this may be an area to improve with regards to satisfaction with VC appointments. For all of the statements, Community care professionals stated 'true' the majority of the time, except for VC being the equivalent to telephone and that their cyber



concerns had been resolved, but overall, this was a positive response from within Community care. This was similar for the responses for Management and Administration.

#### Conclusions, Limitations & Recommendations

The data aimed to explore the perceptions and views held by professionals (and the views of patients) regarding their experiences with VC.

The survey aimed to capture an overall and retrospective understanding of how professionals feel regarding their entire experience with VC since the implementation due to COVID-19. By asking professionals to reflect on the 'full picture', there is less emphasis placed upon everyday difficulties, such as technological restraints, and instead gives an overview of their experiences, as a whole, with VC (in comparison to Chapter 1 capturing 'live data'). Thus, this results in more positive responses within the retrospective data, which has emerged during both the qualitative and quantitative analysis.

To summarise the findings, VC was positively perceived by professionals and patients, and a large acceptability was exhibited by professionals within different services and care sectors. Statistically, professionals' views of patients' experiences were more negative, however, professionals expressed qualitatively that VC added beneficial aspects to their consultations, for instance, allowing them to make effective clinical decisions on the need for FTF. In an attempt to explain the lower rated responses given by professionals, perhaps their focus was placed upon the technological restraints they encountered, rather than focusing specifically on clinical efficacy.

VC also prevented the need for FTF appointments, decreasing the need for patients to travel to their appointments, and increasing the accessibility to care for specific cohorts of individuals, such as those with psychological and physical disorders. There was a common perception amongst professionals that VC should be used where it is deemed appropriate, but should act



alongside FTF, and not as a replacement. Nevertheless, the data revealed VC was being implemented more than just when it is necessary, such as to reduce the risks of transmission, and is being utilised regularly by professionals.

The benefits of VC were highlighted, such as improving work-life balance and making work more flexible. The challenges also emerged, with professionals noting, once again, technical issues and access to adequate resources and support was lacking. It seemed evident that, in order to make VC more successful in the future, these issues need to be addressed and sufficient internet, equipment, and support should be made widely available to professionals (and patients). Overall, VC has led to positive outcomes according to responding professionals and the belief that VC should be implemented in the long-term, as an addition to FTF, is widely expressed by professionals, across the entirety of Wales.

It is important to consider the potential limitations of the current data and how these may have impacted the results. The questions in the survey were not forced choice, thus meaning that respondents could choose whether or not they wanted to respond to each question. The result of this was that each question varied in the number of responses it received, and made certain comparisons or analyses difficult. For the qualitative analysis, this meant that respondents did not have to provide comments regarding their responses to the questions and might mean that aspects of professionals' and patients' personal experiences were not captured by the current data.

It is clear that further and more in-depth service development and evaluation is required to continue in order to understand how to apply the early findings from the Phase 1 evaluation to improve the uptake of VC implementation within different care sectors and Health Boards, and its long-term sustainability.



There are some areas within this chapter that are still unanswered, and despite other surveys (e.g., Live data), and on-going interviews being currently carried out by TEC Cymru with clinicians and patients, we are still making many assumptions, and to move forward with VC in Wales we need to understand this better.

For example, we need to understand;

- What the patients have to say retrospectively (rather than relying on professional perception only).
- Why professionals rate patients to have more difficulties than themselves, as the 'live' patient data paints a different picture.
- Why different care sectors and Health boards rate benefits and challenges differently.
- Why some Health Boards, care sectors and specialities offer VC to certain patient groups e.g., condition type and demographics when others don't.
- How best to utilise this retrospective data (and other data sets) to help Health Boards and care sectors to get the best out of VC moving forward – for example, we have identified the gaps, now need to know how to fill them.

To help our understandings, Phase 2 'live' surveys and interviews with patients, families and clinicians are on-going. Observational work would be ideal to obtain more in-depth data and understanding of the use of VC.