



FINAL REPORT OF THE BETTER HEALTH CARE CONNECTIONS VIDEO CONSULTATION PROJECT IN THE FRANKSTON AND MORNINGTON PENINSULA REGION

Experiences in telehealth in a metropolitan area.

July 2013 to June 2017

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SOUTH EASTERN
MELBOURNE

An Australian Government Initiative

A project funded by the Australian Government under the Better Health Care Connections: Promoting Better Practice and Partnerships - Aged Care Multidisciplinary Care Coordination and Advisory Services initiative

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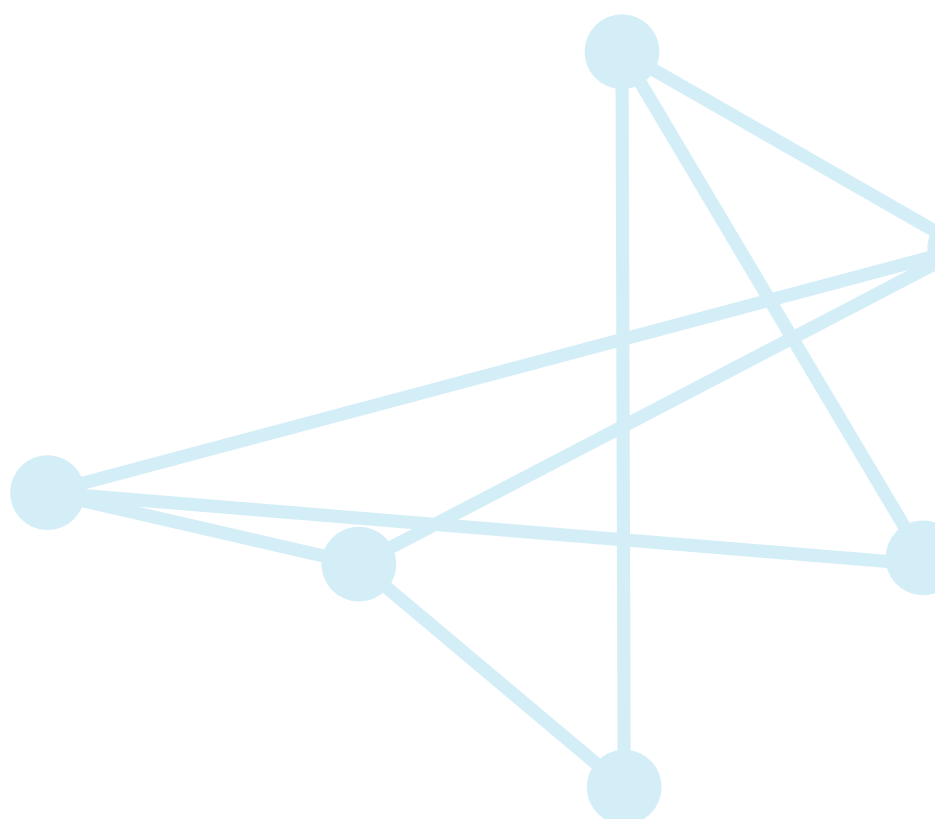
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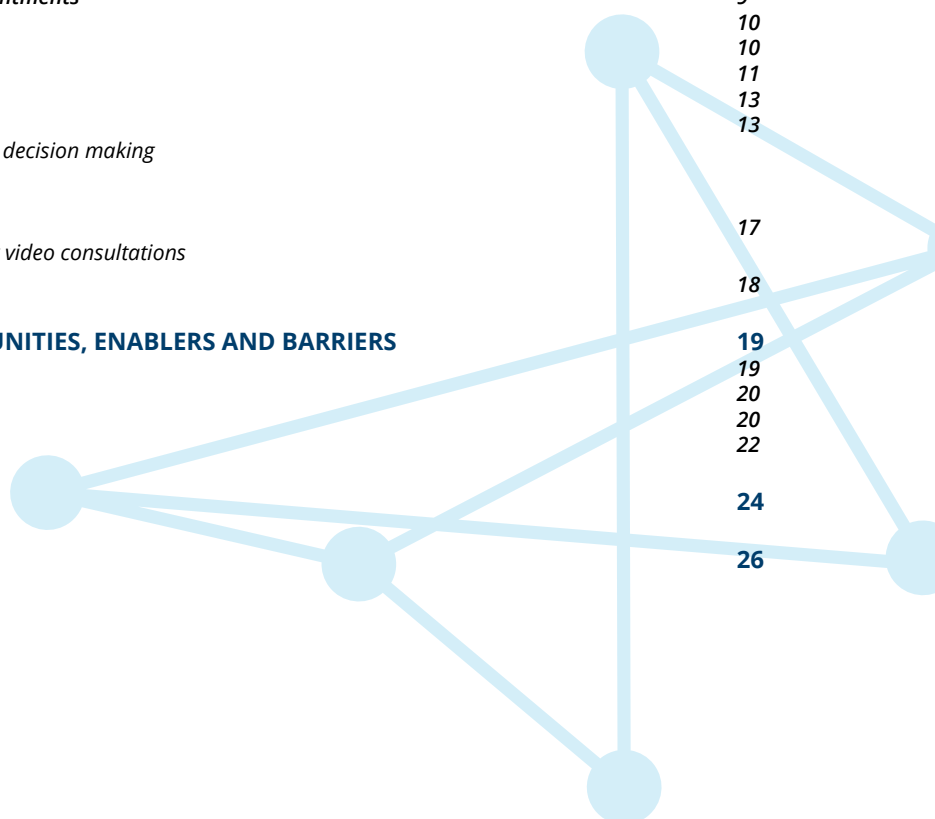
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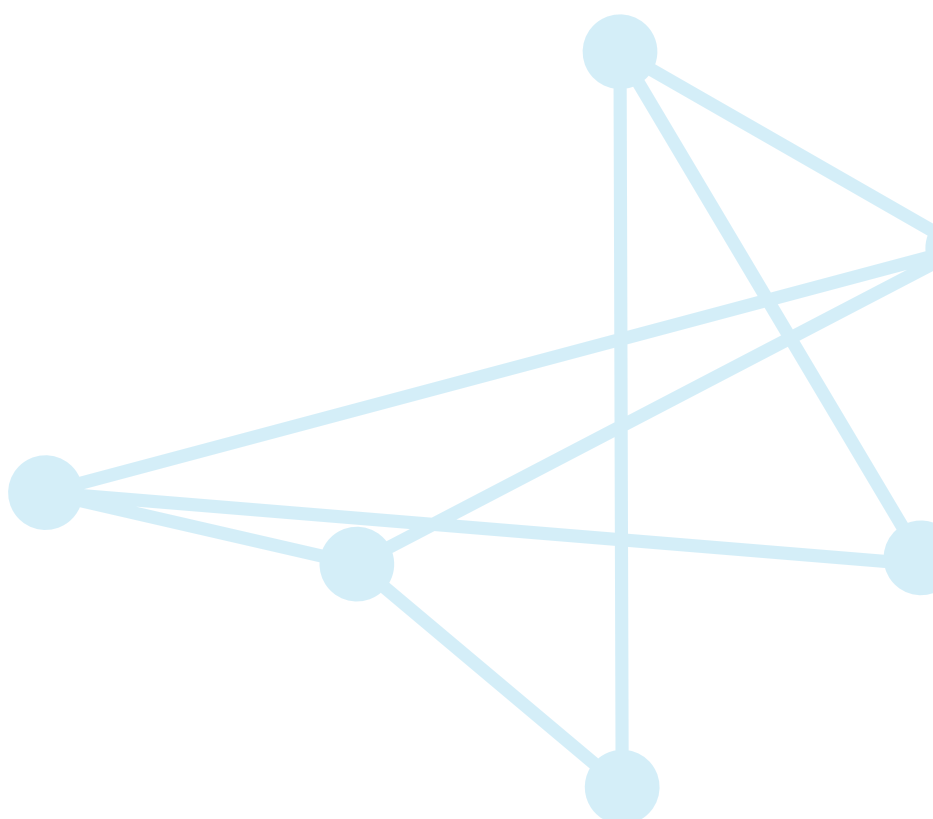
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EXECUTIVE SUMMARY

INTRODUCTION

The purpose of this document is to report on the findings of the video consultation component of the Better Health Care Connections (BHCC) project, which was delivered in a suburban environment.

The primary aim of the project was to determine the value of video consultations in providing access to general practitioners (GPs) for residential aged care facility (RACF) residents when phone calls or non-regular visits were requested. In addition, the project facilitated specialist video consultations into RACFs. It is important to note that there was no intention to replace regular visits with video consultations.

The project has demonstrated that video consultations, when supported, are a cost-effective, timely and clinically useful tool for consulting with clients who live in a Residential Aged Care Facility. Video consultation can increase access to general practitioners, specialists and other multidisciplinary team members.

FUNDING

Frankston-Mornington Peninsula Medicare Local was funded by the Department of Health and Ageing in 2013 to support video consultations between general practices and RACFs. This funding continued under the Department of Social Services and later the Department of Health. Responsibility for the project was transferred to the South Eastern Melbourne Primary Health Network (SEMPHN) in 2015.

PARTICIPANTS

6 residential aged care facilities and 20 individual GPs were engaged in the project.

KEY FINDINGS

- 350 residents received a video consultation with their GP.
- 83% of clients had their needs completely met during the video consultation and did not require additional follow up.
- 88% of GPs and 94% of RACF staff were satisfied with the quality of the video consultations for clinical decision making.
- There were 42 different clinical reasons for consultations, with the most common being palliative care, pain management and urinary infections.
- 72% of appointments were for a review of an existing complaint.
- 63% of consultations lasted less than 5 minutes and 85% lasted less than 10 minutes.
- 213 video consultation appointments were pre-booked.
- Of the 135 appointments that weren't pre-booked, 97% took less than 1 hour to organise.
- 21 RACFs were assisted to prepare for and conduct 44 specialist consultations.

BENEFITS, ENABLERS, BARRIERS AND OPPORTUNITIES

Benefits

- Allowing for timely unscheduled medical support to RACF clients
- Continuity of care from the client's usual practitioner

Enablers

- Champions and leadership
- Coordination, support and training resources

Barriers

- A phone call takes less time to setup and conduct than a video consultation
- Lack of motivation
- Leadership and commitment to improved access to health services in RACFs
- RACF staffing issues
- GPs referral patterns to specialists
- Lack of consistency regarding technology platform
- Inadequate internet speed

- GP frustration over government telehealth initiatives
- Limited access to Medicare for video consultations

Opportunities

- Enhance motivation
- Improved access to multidisciplinary care
- Improved efficiency in service provision
- Secondary consultations
- Explore social uses of video consultation
- Program funding flexibility

RECOMMENDATIONS FOR PHNS TO ENCOURAGE THE USE OF VIDEO CONSULTATION

- Identification of key health areas to apply the technology
- Add a video consultation component to tender specifications so that organisations are encouraged to embed it as part of their usual business
- Embed video consultation solutions in service system redevelopments
- Empower Local Health Networks to become regional leaders for video consultation
- Make 'how to' video consultation resources available to local service providers
- Encourage opportunities for provider support
- Encourage consumer engagement

INTRODUCTION

The purpose of this report is to evaluate the video consultation component of the Better Health Care Connections project delivered in the Frankston and Mornington Peninsula region of the South Eastern Melbourne Primary Health Network (SEMPHN) catchment.

The report focuses on the general practitioner (GP) to residential aged care facility (RACF) video consultation pilot of the program but also includes our experience of video consultation use for medical specialists and multidisciplinary care.

The report draws on the learnings from three years of implementing and supporting video consultations.

BACKGROUND

Demographics

The Frankston and Mornington Peninsula has one of the highest proportions of older people in Victoria. People aged over 65 years' old account for 18% of the catchment, compared to the state average of 14%. This is expected to rise to 32% by 2019. The catchment also has more residential aged care (RACF) residents than most Victorian localities, with 39 aged care facilities that manage over 3,320 beds¹. The majority of the catchment is suburban with some sparsely populated outer areas classified as inner regional. The GP workforce that supports aged care, tends to be located within 5 to 20 minutes of the facility. New models of care are beginning to emerge such as GPs co-located with RACFs and an increasing role for nurse practitioners.

Video consultations for the provision of clinical services

The basic premise of video consultations for residents living within RACFs is to remove barriers to accessing medical services. Currently GP attendances at aged care facilities generally involve face-to-face visits at regular times, supplemented with ad hoc phone calls and requests to attend the facility for urgent assessments. Through video consultation, aged care services can improve timeliness and effectiveness of GP responses, particularly for unscheduled requests.

Video consultations have been shown to have similar effectiveness as face-to-face consultations, while being delivered at a lower cost².

Video consultations have been used for medical specialist support particularly in rural and remote Australia for well over 10 years. Circumstances that make it difficult for clients to attend face-to-face are usually related to difficulty attending the physical location at an appropriate time. Reasons for this may include:

- The clinic is located too far away
- The person requiring assistance is bed ridden
- The person requiring assistance has a disability or mental health issue that makes it difficult for them to leave their home
- The person requiring assistance has social constraints, such as caring for other children, work responsibilities etc.

While video consultations will never completely replace traditional face-to-face consultations, they are a valuable tool that enable clinicians to see clients in a timelier and cost effective manner.

DEFINITION

For this report, video consultation or telehealth refers to a real-time consultation between a clinician and a client, who are not co-located, using video consultations programs over the internet.

Both parties can see and hear each other. It does not refer to telephone consultations, or recordings, and it does not include telemonitoring devices, such as diagnostic tools that send data back to a remote clinician.

¹ Australian Bureau of Statistics. *Population Projections, Australia, 2012 to 2101*.

² VA Wade, J Karnon, AG Elshaug, JE Hiller. *A systematic review of economic analyses of telehealth services using real time video communication. BMC Health Services Research 2010 10:233.*

FUNDING

Better Health Care Connections

The Better Health Care Connections: Promoting Better Practice and Partnerships - Aged Care Multidisciplinary Care Coordination and Advisory Services initiative was a four year project initially funded by the Department of Health and Ageing, later the Department of Social Services and finally the Department of Health. It was implemented at nine sites across Australia representing rural and urban regions. The program described in this report was commenced by the Frankston-Mornington Peninsula Medicare Local (FMPML) and completed by the SEMPML.

This project was multifaceted and focussed on increasing access to primary care services for clients in RACFs.

Video consultation funding

GP-to-RACF video consultation

The Better Health Care Connections (BHCC) funding included a major focus on GP video consultation services. GP-to-resident consultations are not funded by Medicare and the project funds were used to reimburse GPs for the video consultation.

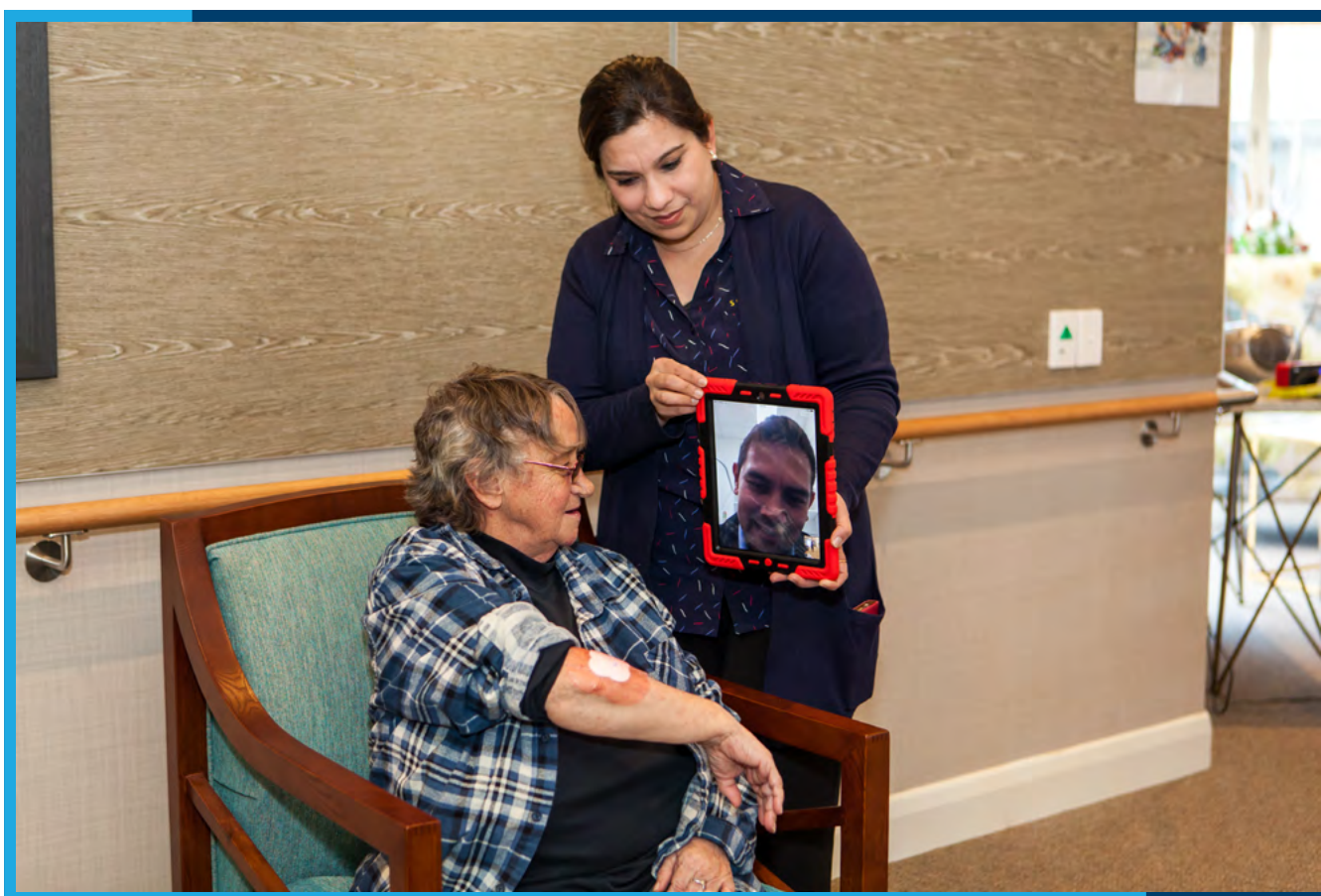
Participating RACFs received participation payments.

Specialist-to-RACF video consultation

The project facilitated the use of Medicare payments for specialist video consultations to RACF residents.

Multidisciplinary access

Innovative uses of video consultation to increase access to allied health and other providers were also explored.



PARTICIPANTS

Engagement of RACFs and GPs

In the Frankston and Mornington Peninsula region, four RACFs were initially engaged to implement video consultation with their GP service providers. In addition, support was provided to the Local Health Network (LHN) residential-in-reach team to use video consultation to communicate with RACF residents.

The following inclusion criteria were used when identifying the RACFs to participate in the project:

- More than 90 beds
- Had not changed management over the past 12 months
- Not psychogeriatric facility
- No outstanding Department of Health and Ageing (DoHA) investigations
- No outstanding legal proceedings

Initially four RACFs were selected as sites for the video consultation project implementation following an Expression of Interest process, and they were inducted from January to June 2014.

Three of the RACFs were for-profit, one not-for-profit. The bed numbers ranged from 100 -160 at the time of implementation. Since the project began, each facility has undertaken infrastructure work and the recent bed numbers range from 60 – 224 beds (with two facilities still constructing and not up to bed capacity). The average age of the residents was 86-90 years old with an age range of 40-104. There were more female residents (68-82%) to males (18-32%) in each of the facilities. Each of the aged care facilities had 24 hour nurse coverage.

Towards the end of the project, two other facilities were included: one with 120 beds and another with 34 beds. The smaller RACF was included because it was in a more remote location, beyond the visiting area for after hours locum services.

Over the three years of the project, 20 GPs were contracted and 16 of those GPs participated in the project. The four pilot RACFs had between 3-15 different GPs providing medical care for residents per facility. All GPs were invited to participate in the project but many did not accept. Approximately 30-60% of attending GPs were represented in the project per facility.

The Local Health Network (Peninsula Health) was involved through the residential-in-reach service which had medical practitioners able to participate.

Coordination and training of participants

GPs, who were already managing residents at the facilities, were identified by the RACF management. The project coordinator contacted them and sought their participation in the project.

The RACF staff supporting the consultations included Clinical Care Coordinators and Division 1 and 2 nurses (also referred to as Registered Nurses and Enrolled Nurses - some of whom were endorsed for medication management) .

The project coordinator trained all participants and assisted with video consultations as required. Training was offered regularly for groups and individuals. Training included explanations of best practice for video consultations, hands on learning, and procedural information such as consent, log forms and clinical notes.

Participants were provided with support materials including resources, procedures and templates. Participants were also shown online clinical resources for palliative care, communication tools for people of cultural and linguistically diverse backgrounds and information about other useful programs that could be accessed via the same mobile devices they were using for video consultation. Training was an iterative process, tailored for various levels of knowledge and building on experiences and outcomes.

VIDEO CONSULTATION TECHNOLOGY PLATFORM

There was no video consultation platform recommended or endorsed to use by the Commonwealth Government for the project. Similarly, in Victoria there was no recommended platform across local health networks. The Australian National Consultative Committee on Electronic Health discussion paper has expressed the need for national coordination and support for a competitive market of interoperable telehealth solution suppliers³.

Initially the Vidyo® video consultation platform was utilised for this project. This was a product designed specifically for medical video consultation requiring registered parties to enter a virtual consulting 'room'. The Vidyo® process was acceptable but had more steps than the familiar video chat programs and many participants ended up defaulting to Skype™ and occasionally FaceTime. At the end of the Vidyo® contract a decision was made to utilise free Skype™ as the preferred platform (2015).

PAYMENTS

RACFs

RACFs were paid a quarterly participation fee, in line with the project guidelines. They were required to purchase their own equipment and had to ensure connectivity requirements were met. RACFs generally used either a tablet (such as an iPad) or a laptop computer and connected using either the existing Wi-Fi connection or using 3/4G mobile data. In some circumstances, smart phones were used.

There were no restrictions on how the participation fee could be spent, but it was to be used to enable video consultation to be conducted. Some RACFs purchased equipment or upgraded their internet connection through the facility. At one stage in the program the Department allowed the project to fund additional equipment up to \$5000. Three facilities used this to invest in more equipment.

GPs

GPs were paid per consultation. The payments were structured in a similar way to the Medicare time-based method that are used for standard consultations. GPs were paid according to the amount of time they spent with the client and the complexity. This payment also included the commitment to forward de-identified data to the BHCC coordinator. GPs also received a small payment per service (10% of service charge) to cover their administration costs.

PAYMENT LEVEL	PAYMENT	
Level A	\$25.20	Straight forward consultation
Level B	\$44.50	Consultation lasting less than 20 minutes for cases relating to one or more health related issue
Level C	\$78.87	Consultation lasting at least 20 minutes for cases relating to one or more health related issue
Level D	\$116.10	Consultation lasting at least 40 minutes for cases in relation to one or more health related issue.

Table 1. GP payments

³ Australian National Consultative Committee on Electronic Health. A National Telehealth Strategy For Australia – For Discussion. 2011

REMOTE DIAGNOSTIC DEVICES

From March 2015, remote diagnostic devices were trialled to enhance the video consultations. These included an electronic otoscope and a stethoscope.

Stethoscopes were not found to add any value to the consultation as the sound could not be shared across the internet and relied on nurse skills in assessment which was varied.

Otoscopes were investigated as an option for RACFs to capture images and share them with doctors. However, none of the participants opted to use the otoscopes.

DATA AND FINDINGS

Data was collected during the project for guideline adherence, to help answer 6 monthly key performance indicators and to explore early implementation findings. The key data collected during the project was from:

- GP and RACF video consultations log forms
- Baseline and trend surveys on attitude, efficiency and effectiveness of video consultations
- Demographic data on the RACFs
- In-depth interviews and other opportunistic anecdotal data

In the preparation of this report the video consultation log data has been presented with contextual clarification from qualitative program data sources. The commentary for each data section was provided by the BHCC coordinator.

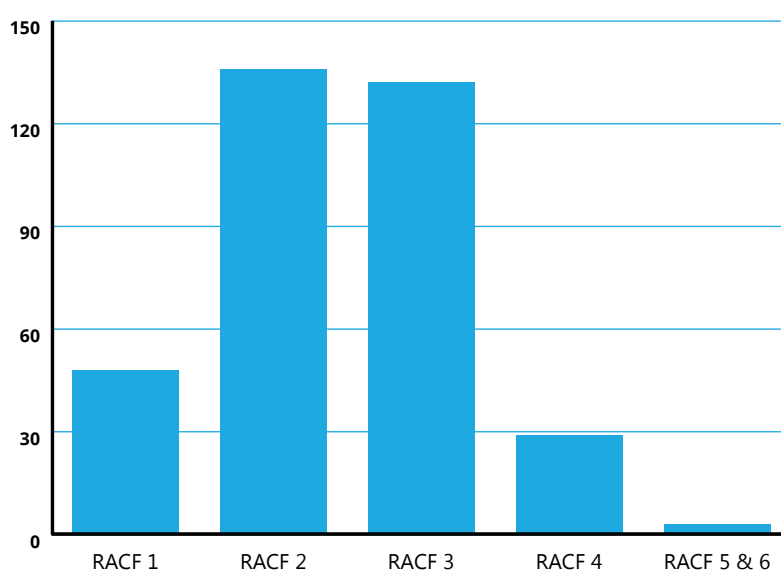
RACF staff and GPs provided comprehensive data logs to the Better Health Care Connections coordinator after each video consultation. Participants were required to provide data on the type and quality of the consultation from a technology and clinical perspective. A total of 350 GP video consultations were performed over the course of the project. Due to the timeframe of the report, the data from 348 GP-RACF consultations was available for review.

Comments were sourced from the video consultation logs, as well as from transcribed interviews with participating GPs, nurses, residents and administrators.

GP VIDEO CONSULTATION UPTAKE

The project guidelines anticipated a maximum of 250 video consultations per RACF per annum. The GP video consultation uptake for this region (and some other regions) was well below this maximum. The total number of consultations across the four main participating RACFs was 345 and the annual number of consultations was approximately 100 (Figure 1). Three of the pilot RACFs participated for a total of 42 months, another for 39 months. It should also be noted that it took approximately 6 months of contact before video consultation began. The interruption to funding with the defunding of Medicare Locals and the creation of PHNs disrupted the sites and a repeat implementation of the program was required.

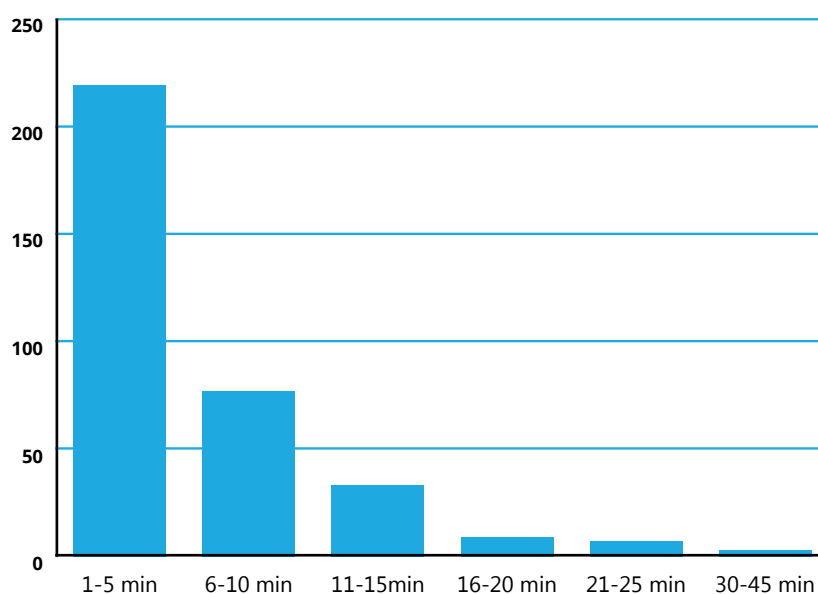
Figure 1. Number of GP video consultations for pilot RACFs



LENGTH OF CONSULTATION AND TIMING OF APPOINTMENTS

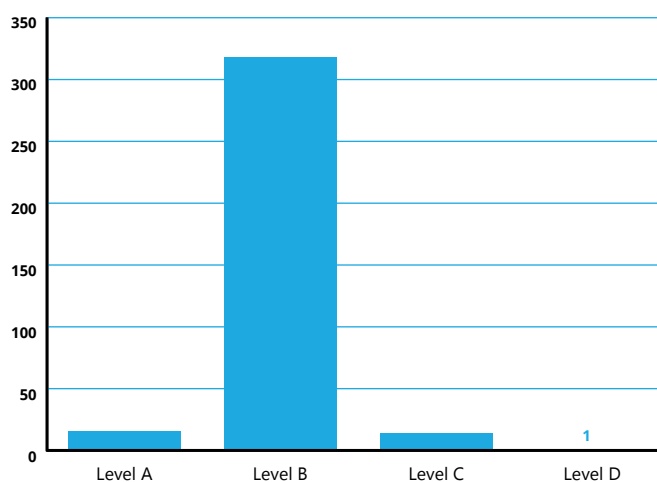
85% (n= 296) of consultations lasted less than 10 minutes, with 63% (n=219) less than 5 minutes in length. The chart below provides a breakdown of consultation length (Figure 2).

Figure 2. Length of video consultation



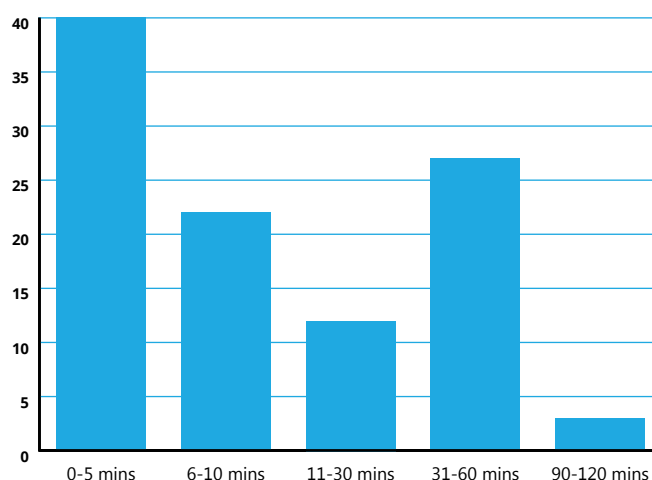
The shorter length of time however did not readily translate into the lowest level payment (Figure 3). The majority (91%) of video consult service claims were billed as Level B (consultation lasting less than 20 minutes for cases that are not obvious or straight forward in relation to one or more health related issues). This reflected the complex background history or medication regimen of the aged clients which would be considered for every clinical decision. The good working knowledge of each resident by their usual clinician would influence the speed of decision making.

Figure 3. Type of billable consultation



VIDEO CONSULTATION BOOKINGS

Figure 4. Time to arrange video consultation



Video consultations were either pre booked or requested ad hoc as required.

- 213 video consultation appointments were pre-booked. Most of these were undertaken for a 'clinic' of several residents in lieu of using a locum to cover periods of non-attendance at RACFs.
- Of the 135 unplanned appointments, 97% took less than 1 hour to organise, with only 3 taking more than an hour to arrange.

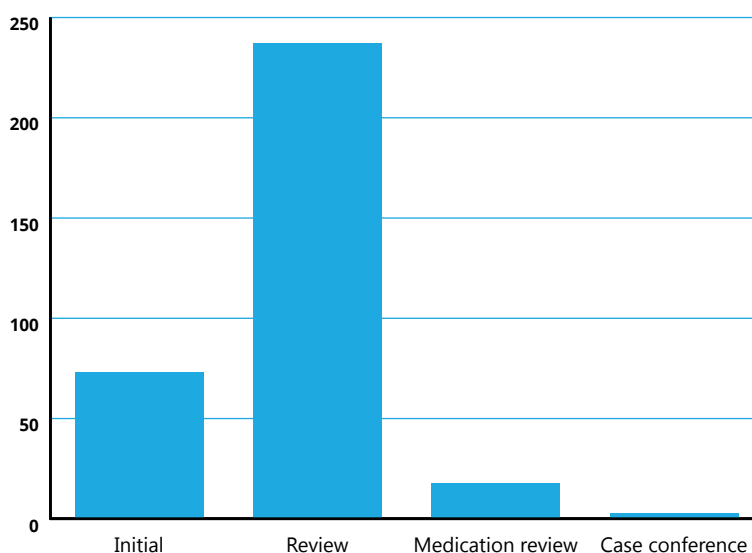
Some program sites in other regions of Australia had success with GPs booking set video consultation clinic times. Our program encouraged this to be trialled but in general video consultation was used on an 'as needs' basis.

TYPES OF CONSULTATIONS

72% of appointments were for a review of an existing complaint.

The chart below (Figure 5) shows the breakdown of the different appointment types, identified by the GPs as the primary reason for contact. Although not shown in this figure, some consultations required a number of other problems to be discussed (new or existing). The consultations often included medication reviews as part of the assessment.

Figure 5. Primary type of consultation



REASON FOR CONSULTATIONS

There were 42 different clinical reasons for consultations, with the most common being palliative care, pain management and urinary infections. Figure 6 shows that video consultation was used for a much wider range of conditions than was initially identified by 15 senior RACF nurses when surveyed during the early implementation of the project in 2014-15. The nurses were asked which conditions they considered would be managed by video consultation. Many had difficulty determining which conditions would be useful.

The main areas identified were wound care and skin conditions such as rashes.

Other suggestions included:

- Minor ailments or follow up reviews which were not urgent
- Situations where the GP was unable to get to the facility in a timely manner
- Difficulties organising family conferences
- Situations where there was an opportunity to treat the resident at home rather than send them to hospital.

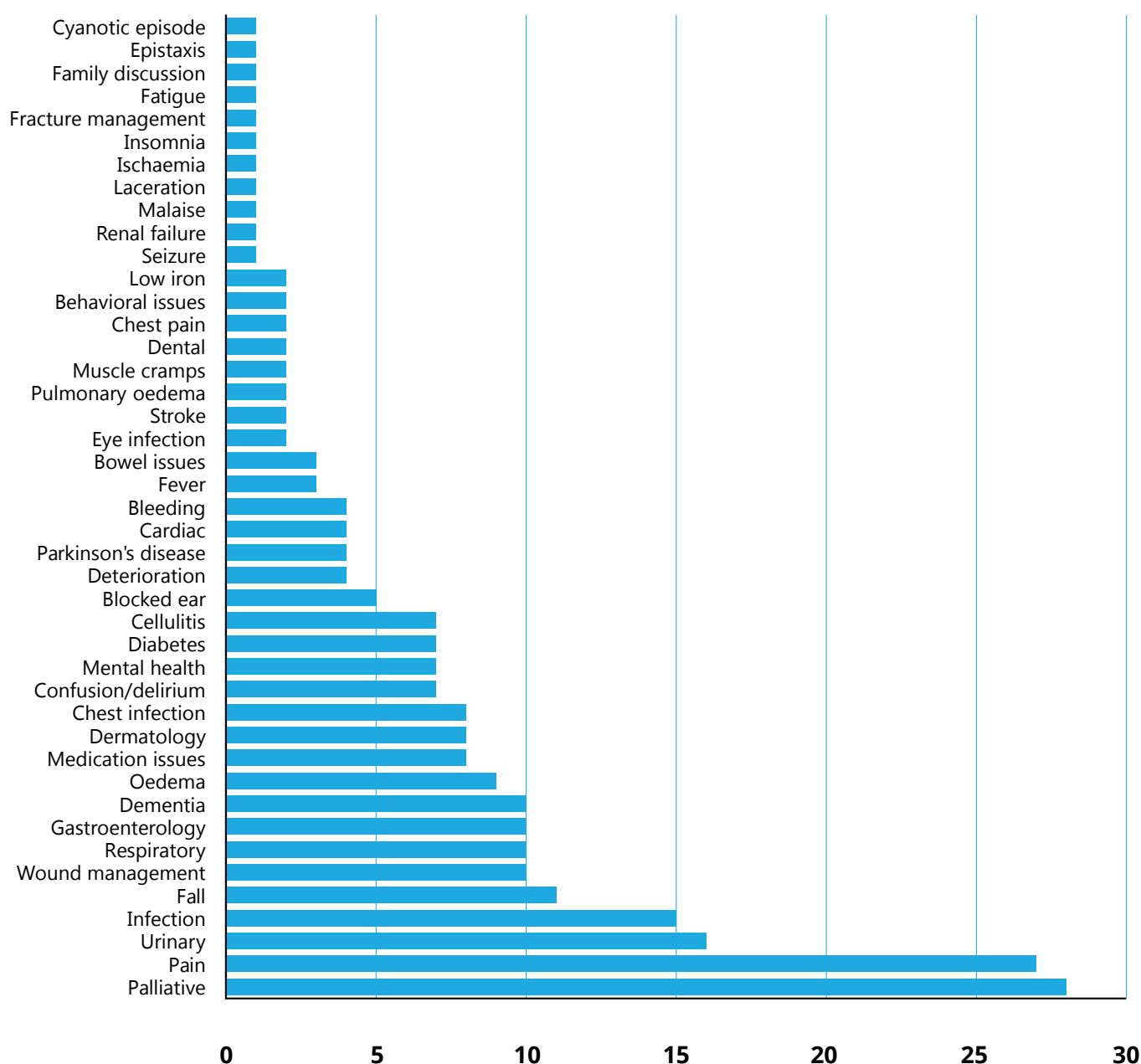
Nurses were also surveyed after video consultation had been established and gave similar responses.

GPs were also surveyed (9 at the beginning of the project and 6 once established) about conditions they thought would be managed by video consultation. GPs responses were similar to the nurses but they identified more specific situations particularly in the post survey.

Situations they identified included:

- Non-urgent illnesses such as shortness of breath or abdominal pain
- Out of hours emergency support
- When visual assessment was needed - behavioural changes, changes in mental or physical condition between visits
- When the staff member was not confident and a demonstration not a description was required

Figure 6. Reason for consultation



RACF Staff Comments



Thrilled to have finally met GP 'face to face' as he usually comes for visits after hours. [Some procedural things like ACFI diagnosis confirmation are hard to implement after hours as the specialists nurse only works during business hours].

OUTCOME OF VIDEO CONSULTATION

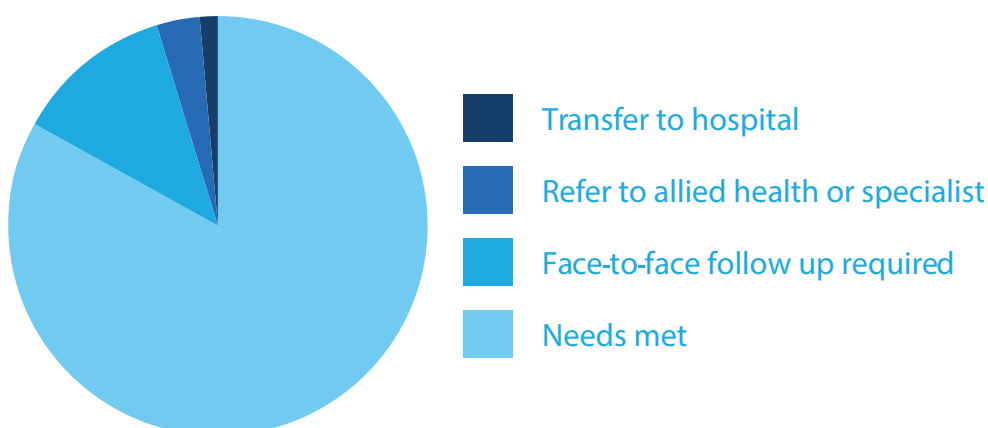
The participants provided information on client outcomes following the video consultation. The majority had effective resolution of their care needs by the video consultation:

- 83% of clients had their needs met by the video consultation
- 13% required a GP face-to-face follow up appointment
- 3% were referred to either an allied health clinician or a specialist
- 1% resulted in transfer to hospital

A range of referrals were organised at the time of the video consultations:

- Pain, palliative care, psychiatry and cardiology specialists
- Allied health referrals for podiatry, physiotherapy and dentistry.
- Pathology and radiology investigations, including x-ray (3), CT Scan (2), ultrasound, blood tests (4) and urinalysis

Figure 7. Outcome of consultation



QUALITY OF VIDEO CONSULTATIONS

Three key areas of quality were reported on the GP and RACF log sheets:

- Quality of the consultation for clinical decision making
- Technical quality
- Consumer satisfaction

Quality of consultation for clinical decision making

Both RACF staff and GPs were asked to measure their satisfaction with the quality of each consultation for clinical decision making. There were 330 responses to this question.

Of the RACF staff, 95% were satisfied with the quality of the consultation. Of these, 2% found it better than a face-to-face consultation and 54% found it to be equal to face-to-face. When RACF staff were not satisfied, this was mostly due to issues around the technology failing and in one instance a GP who was continually interrupted.

Of the GPs, 92% were satisfied with the quality of the consultation for clinical decision making compared to face-to-face. Of these, 2% found it to be better than a face-to-face consultation. Some of the reasons for this satisfaction included being shown the wound by the nurse thus having a better view of a wound, and being able to observe a client in the agitated state in the context of the client's room.

GP Comment



I love the fact that I can see the resident and because I see them every week and I have for ages, I can quickly see if they're super sick or not too bad, do you know what I mean? I can get that initial assessment that you just can't get over the telephone and if there's an unfamiliar staff member I don't have to say, 'Does she look sick compared to usual.'

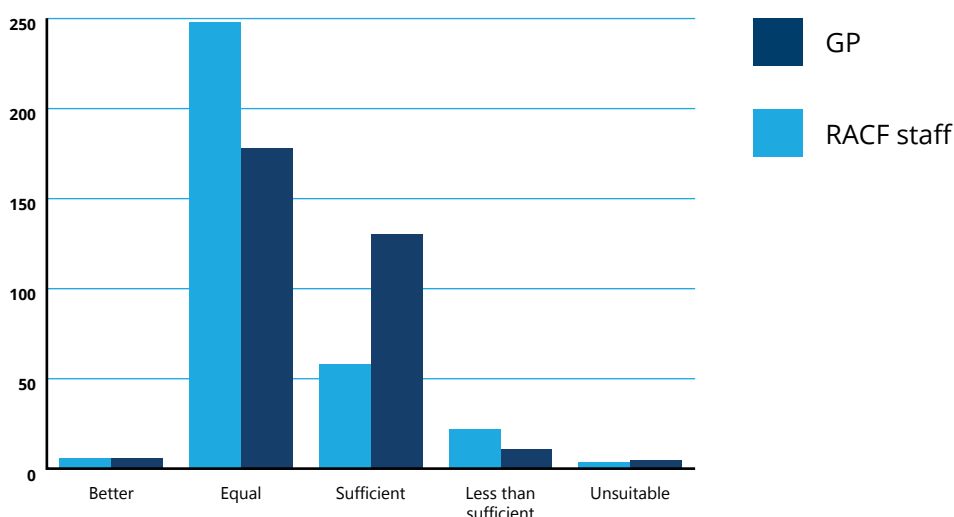
GP Comment



For a lot of issues, a lot of physical complaints, I can get nearly everything from seeing the patient on the video consult. About the only two things that are an issue are listening to someone's chest or looking in their ears.

Three GPs found that they needed to physically examine the client, and this made the consultations less than sufficient. Two also had technical issues that made the consultation unsuitable.

Figure 8. RACF staff and GP consultation quality rating (compared to face-to-face)



One client was recognised by the GP as having a condition that was quite serious. The RACF staff hadn't identified the complexity of the symptoms and would not have necessarily thought to get a GP to see the client prior to the next scheduled GP appointment. Because the GP saw the client via video consultation, the client was able to be monitored over the shift with advice on when to transfer to hospital, if required. The RACF staff felt well supported to manage the client.

Quality of Technology

Poor quality audio and video can be a barrier when using video consultation technology. In most cases poor quality audio and video is related to insufficient internet speeds. This evaluation examined the operators' satisfaction with the audio/visual connectivity quality for each consultation. There were 347 responses from RACF staff and 346 from GPs. The majority of responses were a positive experience with the technology.

Of the RACF staff, 67% reported good quality technical function, 23% said the quality was acceptable and only 10% of consultations were reported as having been poor technical quality.

GPs were slightly more satisfied, although results overall were similar, with 77% saying quality was good, 12% that it was acceptable and 11% that it was poor.

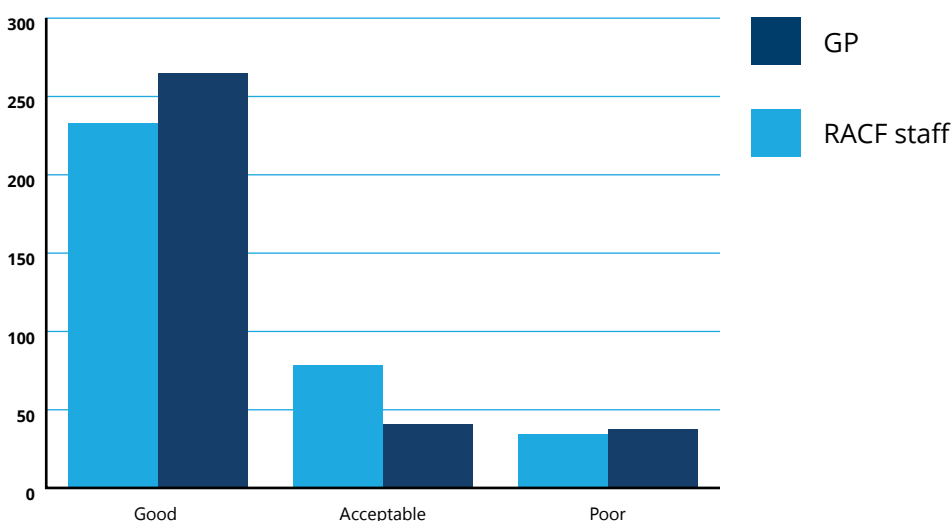
The issues that were reported were almost entirely due to connectivity issues. Problems included:

- Pictures freezing
- Sound dropping out
- Blurry pictures

In one instance the GP had an issue setting up. In another instance, a GP tried to connect by video consultation for 20 minutes before giving up and making the trip into the facility to assess the resident.

Consultations that were aborted were not consistently recorded by the RACFs, so our data in this area is incomplete.

Figure 9. Technical quality of the video consultation



GP Comment



The biggest issue is accessibility, so that if I get a phone call from a facility on the weekend or late of an evening sometimes the staff won't know how to use the system or they won't be confident using the system or they can't find the iPad or whatever type of system they're using. The other issue, sometimes the technology is such that there's delay or I can't see them very well or they can't hear me very well.

GP Feedback

One GP noted that he can receive up 8 calls from RACF's per day. Video consultation enabled him to see some of these clients from his practice in between other clients. It takes only a little longer than a phone call and potentially saved him a trip or several trips to RACFs.

GP Comment

Good to see the impact of over-sedation on a complex care patient. I was able to look at the patient in the room and assess reduced conscious state, poor swallowing, grimacing reactions.

Client satisfaction

Overall, clients who could provide feedback on their experience found it to be positive and worthwhile. The widespread acceptance of the technological consultation was perhaps the biggest surprise in the findings given that most of the residents were over 80 years of age. GPs and RACFs also measured their perception of the patient care experience, as distinct from their own experience.

- 90% of residents who could comment, rated their experience as positive.
- GPs rated 92% of consultations as positive care experiences for the resident.
- 96% of RACF staff reported that the client had a satisfactory care experience.

Benefits identified by staff included:

- Convenient for the resident
- The ability to manage issues earlier than if they waited for a scheduled visit from the doctor

Where RACF staff were unsure or perceived the client experience to be less than satisfactory this was usually because the client was in a confused state or because of technical difficulties affecting the quality of the video consultation.

Resident's Comments

Happy to see a GP.

Not really comfortable 'talking to the screen'.

Didn't have to wait. GP was able to see the condition on my skin.

Easy to see and understand.

Enjoyed consultation.

Pleased to be able to tell doctor of pain issue.

Pleased to talk to GP via 'television'.

I thought it was amazing. I looked good.

'It was wonderful'. [The doctor showed her baby on screen which added an extra thrill]

Very interesting never tried anything like this before.

OTHER VIDEO CONSULTATION ACTIVITY SUPPORTED BY THE BETTER HEALTH CARE CONNECTIONS FUNDING

Although the focus of the project was GP-to-RACF funding, the project did support other types of video consultations to improve access to clinicians when the opportunities arose.

SPECIALIST-TO-RACF

An aspect of video consultations, which is currently funded by Medicare but is underutilised, is the ability for clients in RACFs to see their specialist using video consultation. For many clients accessing their specialist is difficult, due to their location or their frailty. Sometimes clients have to be sedated in order to attend an outpatient appointment. RACFs report that often the client will cancel their outpatient or specialist appointments because the difficulty in getting there outweighs the benefit for them.

The project undertook to increase access for residents at specialist-to-RACFs consultations using video consultations. These consultations are currently funded by Medicare for the specialist and for patient-end support by a GP, practice nurse, nurse practitioner or Aboriginal Health Worker. The Commonwealth Government had been encouraging uptake for this access from 2011 to June 2014 with the Telehealth Financial Incentives Program. In the first 6 months of the BHCC project, these incentive payments were still available for RACFs. The BHCC coordinator supported eligible RACFs to access these incentives.

Training was offered for groups and one-to-one support was provided to GPs and RACFs wanting to implement video consultation. After the Telehealth Incentive payments ceased, the program continued to provide training for specialist consultations when requested.

Over the 3 years of the project, 21 RACFs were assisted to prepare for and/or conduct 44 specialist to-RACF consultations.

An additional 24 GPs received training in video consultations and 8 participated in video consultations as the patient-end practitioner. Three specialists were also trained in providing video consultations. The consultation numbers

were not part of the regular data collection for the BHCC therefore they may be under reported.

Consultations were undertaken with the following physicians:

- Aged psychiatrists
- Neurologists (including movement disorder specialty)
- Geriatricians
- Pain medicine specialists
- Palliative care physicians
- Dermatologists
- Renal physicians
- Psycho-geriatricians
- Cardiologists
- Specialist services for rarer conditions

Directories of specialists that offer video consultations

A telehealth-ready specialist listing was developed at the conclusion of the project. It includes 44 specialists who provide services in the Frankston and Mornington Peninsula catchment via video consultation. A range of specialty fields can be accessed including endocrinology, aged psychiatry, geriatric medicine, cardiology, nephrology, palliative care, rehabilitation and chronic pain, rheumatology, urology, and oncology/haematology.

GPs can also access a directory provided by the Australian College of Rural and Remote Medicine (ACRRM) although it relies on providers to keep it up-to-date.

The National Health Services Directory has an option for providers to check the telehealth capable box which may be of use in the future. It is recommended that RACFs and GPs ask existing specialist services if they will undertake this service as it may not be advertised.

MULTIDISCIPLINARY MODELS

The Frankston and Mornington Peninsula region has a number of nurse practitioners working in aged care under different models of care. They enhance the multidisciplinary care available to the aged in community and residential care. Some of the service providers that received video consultation support as part of the BHCC project are described below. Other aged care nurse practitioner services exist that were not involved in the BHCC such as mental health clinicians. Nurse practitioners can access Medicare items for patient-end support in specialist telehealth consultations at RACFs, however there has been no evidence of this occurring.

GP-nurse practitioner team

To demonstrate the value of video consultation with RACFs, a GP/nurse practitioner team participated in the project. Unlike the other GPs who balanced clinic work with residential care commitments, this practice only provides in-reach residential aged care for about 100 clients across 4-6 facilities. Each resident is under the care of both practitioners as a blended model of care. On a daily basis, the team jointly determine which aspects of care will be undertaken for which residents in the facilities and by whom. Both the GP and nurse practitioner claim Medicare payments for their services at the RACF. The scope of practice for the nurse practitioner includes independent assessment, management, referral and some prescribing under the provider number. Both the GP and the nurse practitioner have been strong proponents of video consultations and have been leaders in the use of the tool in situations that suit their practice needs.

Geriatric clinic

The Local Health Networks geriatric clinic was supported by the BHCC Coordinator to add a video consultation component to its service at the end of 2016. At the time of this report this has not resulted in one video consultation with the nurse practitioner supporting the client in the community for a geriatrician consult. However, an added benefit that resulted from this change in practice was the follow-up to residents of RACFs discharged from the unit after hospitalisation. Previously there was no direct follow up for this client group, although this was offered for people who lived at home. Now a geriatrician video consultation is offered as part of the service on discharge to RACFs. To date this has not been taken up by the facilities. The service may need to consider further education around these changes for RACF staff and GPs.

Residential-in-reach

The Local Health Networks residential-in-reach team piloted 5 multidisciplinary video consultation consultations for the BHCC program to try to enhance the assessment and management process they provided for falls (2) and wound care (3) interventions.

Wound care reviews were undertaken by a nurse practitioner and RACF nurses. The quality was impacted by poor connectivity and lighting (basic video consultation training highlights the importance of planning for good lighting). The wound care nurse had some time savings from not having to travel and potentially an increase in the number of clients that could be seen that day. For the falls assessment and management, the specialist physiotherapist was on site with the RACF nurse and they video consulted with the pharmacist (usually the pharmacist just received medication chart and did not meet the resident). The pharmacist found seeing the resident gave greater information and the RACF nurses were pleased with the outcomes of the consultations for both wound and falls care for support and ongoing planning. The specialist physiotherapist found it took more time for not much more information. These trials have not been ongoing and there has been a change to the services offered through the team with the removal of the falls management component.

VIDEO CONSULTATION BENEFITS, OPPORTUNITIES, ENABLERS AND BARRIERS

BENEFITS

Allowing for timely medical support to RACF clients

GPs often attend visits to RACF residents at the beginning or end of the day as it can be difficult or impossible to access them for an urgent or non-planned face-to-face consultation when they are booked for a full case load of patients at their clinics.

Paid video consultations allowed the GPs to:

- Assess the residents remotely
- Provide quicker access to visual assessment
- Replace the reliance on the description of an issue over the phone for decision making

Even if a face-to-face visit was needed for follow up, some interim decisions could be made and the urgency of the situation determined via video consultation.

RACFs reported unsatisfactory delays with face-to-face locum service coverage in the after hours periods. The GP-RACF pilot demonstrated some attempt by GPs to use the tool for after hours consultations with 5% of the 348 video consultations being held between 5-9.30pm. However, no comprehensive after hours service plan was explored.

Throughout the project, we collected many examples of unpleasant experiences of residents attempting to access off site medical specialist care, these included:

- Being transported to outpatient and specialist clinics on trolleys that wouldn't fit through doors or could not be manoeuvred into suitable positions
- Long delays to access services
- Cancellations due to ill health
- Issues with requiring staff or family to escort the resident to an offsite consultation
- Traumatic behavioural responses from some residents with dementia
- Certain residents deemed too frail to travel to appointments

Video consultation enhances access for these groups of residents to receive appropriate care in an adequate timeframe.

The benefits of video consultation were achieved despite most of the services being delivered in a suburban area, with the GPs and specialists usually working less than 30 minutes from the RACF. Video consultation doesn't just overcome the barrier of distance (a key driver for rural/remote areas) but also the barrier faced by people who find it very difficult to leave their home at all. It has a measurable impact on the timeliness of care.

Continuity of care from the client's usual practitioner

Video consultations provided continuity of support to clients when their usual doctor could not attend in person for consecutive weeks due to such things as health issues or family commitments including school holidays. This removed the need for locum coverage in the business hours, and allowed for continuity of care by providers who knew the residents and staff well. Video consultation for infectious disease outbreaks such as gastroenteritis and influenza, were not used in our project, but peaks in uptake were noted in another BHCC project during such outbreaks. GPs participating in the project were receptive to this as a suitable use.

RACF Staff Comment

...you are able to get the GP who knows the resident rather than maybe have to have a locum who has no knowledge of the person at all

Video consultations also allow for greater collaboration in case management. Residents, nurses and family have the opportunity to be part of the care planning when video consultations are used compared with phone calls or when the resident is sent to an offsite specialist for a consultation. The information transfer is more seamless and there are opportunities for questions and clarification.

ENABLERS

Champions and leadership

The greatest successes occurred when there were motivated GP champions encouraging the use of video consultation and motivated leadership teams within the RACFs clearly progressing the uptake, procedures, and education around video consultations.

Coordination, support and training resources

The coordinator role has been demonstrated by successful specialist video consultation consulting services such as the Royal Children's Hospital, Barwon Health and Anywhere Healthcare.

The BHCC coordinator's role was to provide initial training and support for providers in video consultation. However, we discovered that once this support was withdrawn, the number of video consultations reduced.

Although this was not originally planned, in the last few months of the project the BHCC coordinator increased the amount of support for providers. This resulted in a significant increase in the number of consultations.

This experience highlights that some level of coordination is required and front line clinicians are often not in a position to do that work. The coordination role could be undertaken by the practice staff if GP clinics were fully involved in the process or if the RACF had dedicated funding for the role. This may only be cost effective for RACFs that have a number of different sites, supported by the same general practice.

BARRIERS

A phone call takes less time to setup and conduct than a video consultation

To hold a video consultation, the RACF nurse needs to first contact the GP by phone and then agree to use video consultation at a certain time (either immediately or when the GP is available). This was somewhat frustrating to practitioners, however it should be noted that phone call consultations remain unpaid GP services and generally provide less information for decision making than video consultations.

Lack of motivation

The biggest barrier to effective video consultations was the lack of sustained motivation by GPs and RACF staff to embed video consultation into their day-to-day operations and to remain independently motivated.

The BHCC coordinator was able to motivate individuals to provide video consultations in the short term but once she withdrew, the number of video consultations significantly dropped. This was despite the majority of providers stating that video consultation was as effective as a face-to-face consultation. Competing priorities for RACFs continued to overwhelm any attempt to embed video consultation in to usual practice and GPs continued existing patterns of practice.

GP Comment

'...there's resistance to changing from something that was incredibly efficient to something that took a bit of extra learning and upskilling, to realise that once you've got those skills that's actually more efficient and safer.'

Leadership and commitment to improved access to health services in RACFs

In 2015 the RACF managers were presented with findings from the first half of the implementation of BHCC. It was identified that strong internal leadership, and embedding of video consultation contact procedures were essential for the successful uptake of video consultation. Leadership changes, competing priorities and lack of drive from management created barriers to uptake and a requirement for the project coordinator to continue to provide external support and drive.

RACF staffing issues

Staffing for RACFs to provide adequate support for video consultations can be onerous as no backfill is supplied and staff are 'time poor'. RACF staffing ratios are not mandated by law. Nursing staff are usually very busy with care requirements (medications, care planning, referrals, meetings with families, assessments and care for complex conditions). To undertake video consultation, nurses must be taken from their usual care role. The best time to access extra care staff is during a day shift when there are likely to be clinical care coordinators or team leaders unassigned to a clinical case load (floating). This depends on the facility staffing structure and may also occur into the evening. An initial geriatric consultation or a prebooked GP video consultation clinic of several residents can remove a staff member from the 'floor' for over an hour.

An RACF staff member commented that it is easier for them to just send the resident to an off site specialist consultation, as they do not have to be involved. However, easier does not necessarily translate into the best outcome for the resident.

GPs referral patterns to specialists

There appears to be a reluctance from GPs to refer to some specialists, including geriatricians for elderly people. This effects the uptake of specialist video consultation bookings. A number of nurses commented that some GPs don't see the value of using geriatricians as the GPs have years of experience in aged care medicine.

Lack of consistency regarding technology platform

The Victorian health system, in particular the Local Health Network, makes it difficult to introduce a standardised video consultation platform. In Queensland, all of the public hospitals are part of Queensland Health, so introducing a standard video consultation system that can be used across the whole state has assisted greatly with uptake. Lack of consistency makes it difficult to introduce video consultation in Victoria, with some hospitals having four or more video consultation systems within the one hospital, used differently by different departments or to different patient-end systems.

Inadequate internet speed

Some areas in the catchment have poor internet and 3/4G connectivity.

Certain parts of the RACFs have inadequate WiFi signals. RACF building and development can appear to lack future vision. During the project, building was undertaken in one pilot facility and no WiFi was installed in that wing despite their participation in the video consultation project.

It was also demonstrated that setting up new devices in a large corporation took time (weeks to months) to get IT help and approval.

The NBN broadband roll out is currently underway in this region. This may improve some of the external connectivity issues.

In June 2017, The Technology Roadmap for Aged Care in Australia was released by the Aged Care Industry Technology Council (ACIITC) recognising

the unprecedented elements of change in the population needs, technological advances and aged care service provision. The report identifies technological improvements, adoption and literacy as essential for ensuring improved aged care delivery and consumer choice⁴.

GP frustration over government telehealth initiatives

When the BHCC project first commenced, Medicare was funding incentive payments for GPs, RACFs and specialists to encourage uptake of video consultation (2011-2014). These incentives were significantly cut back in 2013 and then ceased in 2014. The eligibility criteria was severely curtailed and this excluded access for GP-end support payments in the community for most of the Frankston and Mornington Peninsula catchment. This left many clinicians frustrated, as they had invested their time in preparing for video consultations in 2011 and then they were excluded.

Following the eligibility changes however, it was discovered that many of the GPs did not realise RACFs could still access the Medicare funded specialist consultations (anywhere in Australia) and this was not taking place. In fact, Medicare data showed that in 31 December 2013 only 7.6% (211) RACFs across Australia had accessed this incentive⁵.

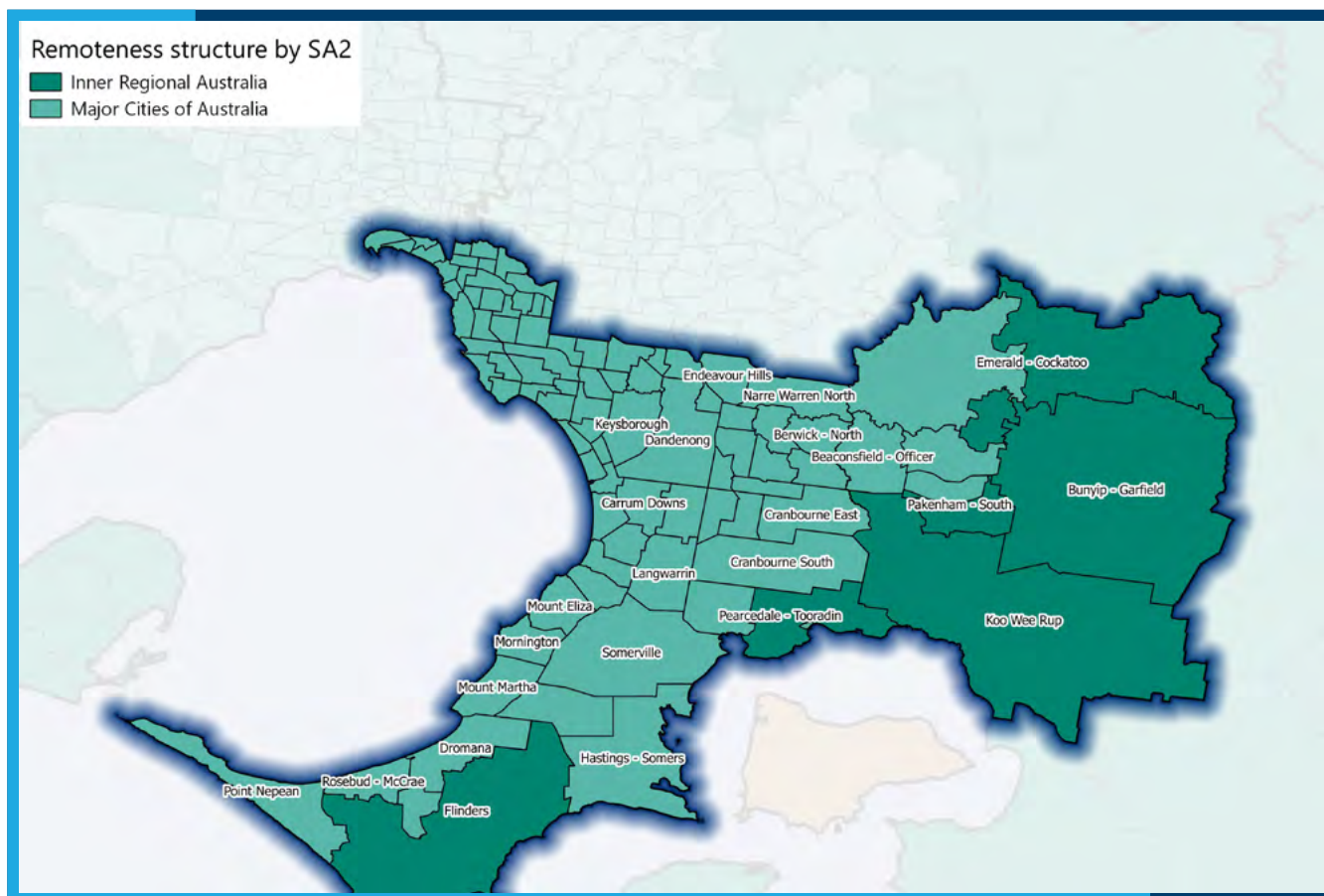
Geographical limitations to accessing Medicare for video consultations

As mentioned above, Medicare funded video consultations payments are available, but only for people in RACFs, or Aboriginal Health Services or for people in the community in regional/remote areas. To be considered regional/remote the client needs to be in an area classified as RA2 or higher with the Australian Standard Geographical Classification(ASGC). In the context of the SEMPHN catchment, the only areas considered RA2 are in the extreme south of the catchment (Boneo, Cape Schanck, Flinders, Point Leo, Main Ridge and Red Hill South) and the east of the catchment (Bunyip, Koo Wee Rup, Emerald, Tooradin). The rest of the catchment are classified Major City (Figure 12).

⁴Aged Care Industry Technology Council (ACIITC). *The Technology Roadmap for Aged Care in Australia*. June 2017. <http://aciitc.com.au/roadmap/> accessed 26 July 2017

⁵Department of Health (DoH), (2014). *MBS online website Factsheet* (accessed June, 2015: http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/Factsheet-Telehealth-30_Jun_2014)

Figure 10. Eligible areas for Medicare funded specialist video consultations (dark green)



Source: Australian Bureau of Statistics. Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure by SA2, July 2011

OPPORTUNITIES

Enhance motivation

Two opportunities present themselves to enhancing motivation:

1. The provision of continued support for organisations to maintain video consultation

The continuation of the BHCC approach would possibly be more effective from a facilitator supporting a larger number of agencies. For example, a state-wide video consultation facilitator could:

- Talk with agencies considering video consultation services; and,
- Provide remote support to setup video consultation for participants on either end of the video consultation.

This is similar to the process used by Royal Children's Hospital and Queensland Health but it relies on a high number of video consultations to make the employment of a facilitator cost effective.

2. Identifying organisations that are already motivated and provide them with the initial support they need to develop a sustainable service.

An alternative approach would be for Local Health Networks or PHNs to identify organisations that are already motivated and provide them with the initial support they need to develop a sustainable service.

The types of provider that might be motivated include those wanting to take advantage of new funding streams attached to outcomes, rather than activity. For example, providing a diabetes education service to a general practice with a capitation funding model similar to the Healthcare Homes model.

These organisations could be identified at a video consultation information session or through an expression of interest request.

Improved access to multidisciplinary care

Multidisciplinary care access is limited under the Medicare system. Allied health professionals are well placed to undertake video consultations as a care option for providing in-reach access to RACFs. In the context of non-fee-for-service funding styles such as trials of capitation funding for chronic diseases, an opportunity exists to build this access into new models of care. Mental health professional access, which has an access inequity under residential care, could be well suited to this technology.

Improved efficiency in service provision

The Local Health Network residential-in-reach team, which has coverage of over 40 RACFs, has shown that some of their services can save travel time by using the technology where appropriate.

Secondary consultations

There are key issues affecting older people in which GPs seek secondary consultations, such as palliative care, pain management, dementia behaviour management and mental health disorders. Video consultation provides opportunities for greater effectiveness with this support.

Authorisation of medication orders by fax

Although GPs can verbally order certain medications by phone or video consultation, they are then required to attend the RACF in a 'reasonable time frame' of one or two days to sign the order. This has been cited by GPs as a barrier to using video consultation as they need to visit the facility anyway. However, there are products available to improve this duplication of effort including fax medication forms.

Explore social uses of video consultation

Given the high rate of acceptance by consumers, there is an opportunity to explore social opportunities of video consultations. Despite our encouragement, we were surprised that the RACFs didn't utilise the new technology for resident social engagement including connection with interstate relatives as a way of keeping them in touch with a deteriorating resident. In general, the video consultation project remained an 'add on' to daily activity. The BHCC team were surprised that consumers (families and residents) were not targeted for marketing around the benefits of video consultations, as this was considered to be a substantial addition to standard services.

Program funding flexibility

The BHCC program was hampered by the strict funding rules and the program staff could not take advantage of the most enthusiastic GPs as funding was limited to specific RACFs. Consideration should be given to video consultation funding being attached to the consumer or practitioner to allow more widespread utilisation and trials.

RECOMMENDATIONS FOR PHNS

Primary Health Networks (PHNs) have been established with the key objectives of increasing the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes, and improving coordination of care to ensure patients receive the right care in the right place at the right time. Video consultation is a tool that can support the achievement of these goals. The SEMPHN program has demonstrated that there are certain barriers and enablers that PHNs are well placed to influence individually or collaboratively. There are 6 Victorian PHNs, three of which have catchments with Major City regions and therefore similar video consultation barriers.

From the SEMPHN BHCC program experience the following options are recommended:

Identification of key areas to apply the technology

All PHNs have key priority areas. Of the six SEMPHN priorities, mental health, Aboriginal and Torres Strait Islander health, and aged care present opportunities to increase access to primary health support, allied health providers and specialists with telehealth.

Programs targeting avoidable hospitalisations, chronic disease management and after hours support are also suitable for the use of this tool. This is particularly the case when there are innovative funding options such as those for flexible coordinated care.

Video consultations in the delivery of commissioned services

Most health providers have the basic equipment required to undertake video consultations, such as a smart phone, tablet or laptop. What is required is the impetus to try it and the motivation to continue. Incorporating video consultations into commissioned services would encourage more organisations to include it as a part of their service.

Recommendations for commissioning:

- Add a video consultation component to tender specifications so that organisations are encouraged to embed it as part of their usual business, particularly where there are innovative funding options such as those for flexible, coordinated care.
- Embed video consultation solutions in service system redevelopments such as the recommissioning of mental health services.

Empower local health networks to become regional leaders for video consultation

The Local Health Networks (LHNs) are the logical hub for video consultation services and should be actively encouraged to expand the number of services that they offer by video consultation. PHNs have developed good linkages with the LHNs and have opportunities to seek regional strategic approaches.

Recommendations for LHN engagement:

- Agreement between organisations to work toward a regional action plan
- Audit of each LHN's current video consultation activities and capacity
- Proactive offers of support for video consultation resources and activities
- Targeting of services that offer home visits such as the Health Independence Programs (HIP) including Residential-in-reach services, and Aged Persons Mental Health teams
- Exploration of nurse practitioner activity in the different services and their potential to utilise video consultation services
- Encouragement of secondary consultations for GPs by video consultation where visual assessment is helpful, for example palliative care or dementia behaviour management

Provider Support

The SEMPHN video consultation project has demonstrated that providing support can increase video consultation uptake. However, given the technical nature of the consultations, more sustained support is required to ensure GPs, specialists, clients, RACF staff and others involved in video consultations begin to use it as every day practice. It is preferable that support would be available for troubleshooting issues as they arise. Without immediate access to troubleshooting, GPs, specialists and others involved in the video consultation may lose confidence.

Recommendations for support:

- Identify motivated organisations at service provider information sessions
- PHN digital health officers could provide initial setup support to organisations motivated to try video consultation
- Supplement individual support with written resource documents and online tools
- Make 'how to' video consultations resources available to local service providers
- Include information about video consultation providers in service navigation resources for consumers and providers such as HealthPathways and Map of Medicine®
- Consider identifying a state-wide resource to provide concierge services. Collaboration between PHNs and strategies through Telehealth 'Communities of Practice' could be effective methods of influence

Encourage consumer engagement

Consumers have received this technology surprisingly well. Sometimes they are more accepting than the staff members and their requests can be a driver for new activity.

Recommendations for consumer engagement:

- Local media coverage involving video consultation opportunities
- Where video consultation services are offered, organisations should be encouraged to promote the access to the services

RESOURCES

The SEMPHN BHCC program utilised the following resources:

SEMPHN region telehealth ready specialists

http://www.semphn.org.au/images/downloads/resources/ehealth/Telehealth/telehealth_final_list_1_May_2017.pdf

- A list of specialists in the SEMPHN catchment who have confirmed that they can provide services by telehealth

RACGP telehealth resources

<https://www.racgp.org.au/telehealth>

- Clinical guidelines
- Standards for general practices offering video consultations
- Telehealth directory

MBS online telehealth

<http://www.mbsonline.gov.au/telehealth>

- MBS telehealth items
- telehealth eligible areas

Royal Children's Hospital introductory video

<http://www.rch.org.au/telehealth/>

- Introduction to telehealth for consumers

Medical Board of Australia, Guidelines for Technology-Based Patient Consultations

<http://www.medicalboard.gov.au/Codes-Guidelines-Policies/Technology-based-consultation-guidelines.aspx>

Australian Nursing Federation. 2013. Telehealth Standards: Registered Nurses. Australian Nursing Federation. Australia

https://crana.org.au/uploads/pdfs/Telehealth_Standards_Registered_Nurses.pdf