



CREATING DIGITAL CHAMPIONS IN PRIMARY CARE

**USING AN ACTION LEARNING SET APPROACH TO
DIGITALLY UPSKILL GENERAL PRACTICE NURSES**

**FULL REPORT
MAY 2020**

Royal College of General Practitioners
Staffordshire STP Technology Enabled
Care Service



Royal College of
General Practitioners

This report is a joint effort between the Royal College of General Practitioners and the Staffordshire STP Technology Enabled Care Service.

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Executive summary

This report presents the collated findings of evaluation feedback submitted by participants of the [Northern Staffordshire technology enabled care service](#) (TECS) team's [action learning set](#) (ALS) programme.¹ The programme aimed to upskill general practice nurses (GPNs) so they were able to confidently promote the use of digital technology to patients and colleagues. ALS sessions were delivered between November 2018 to April 2019; 75 participants successfully completed the programme. This report is a collaboration between the Northern Staffordshire TECS team and the Royal College of General Practitioner's Clinical Innovation and Research Centre (CIRC).

Why carry out this work?

The overarching aim of the ALS programme was to create digital nurse champions in primary care who could encourage and explain the use of a range of digital solutions to augment more traditional approaches to care. It was hoped that participating GPNs would build their knowledge and confidence leading to increased adoption of digital technology in their practice. It was also hypothesised that the creation of digital nurse champions would have a positive impact on other areas including better self-care, improved access to relevant and useful information, a reduction in the number of face-to-face appointments creating more capacity, the promotion of prevention as an intervention and a demonstration of the value of digital particularly in relation to people managing multiple long-term conditions.

How was this work conducted?

Seventy-five GPNs from four delivery boards in England participated in the programme. This included two in-person sessions, provision of tools and remote support provided by the programme team and [Redmoor Health](#).² GPNs were asked to complete a digital literacy baseline and follow-up surveys, the [Leading Change and Adding Value](#)³ questionnaire and a structured telephone interview following completion of the programme.

Data from these evaluations were provided to CIRC to conduct a thematic analysis and synthesise key findings. These findings are presented in this report.

Key findings

The findings of the digital literacy surveys, the LCAV questionnaire and telephone survey demonstrate that the ALS approach to upskilling GPNs is effective at building knowledge and confidence with the aim of creating digital nurse champions. GPNs felt more empowered to promote digital solutions to patients and colleagues, and they spoke very positively of their experiences on the ALS programme.

A summary of outcomes identified through the analysis of these surveys are mapped against the programme objectives, listed below.

¹ CliniTECS [Internet]

² Redmoor Health [Internet]

³ NHS England (2016). *Leading Change, Adding Value*

Summary of key findings

Programme objective	Outcome
1. increased use of public and closed Facebook functionality to support patients with long term conditions	Virtually all GPNs reported that they had increased the use of social media to support patients and Facebook was the most popular type of social media platform.
2. improved access to service information by patients	Though the data were collected before the impact of social media and updated online material could be fully embedded and measured, GPNs reported positively on being able to use social media to share information about their practice. They were also able to promote important or useful information and had started to notice improved engagement with difficult to engage / reach groups.
3. increase in access to self-care information and then shared management of long term condition	A recurring theme throughout the findings is the potential to improve patient access to information. Not only is it easier to share and for family carers to also access but it is also likely to be more up-to-date and plays a significant role in supporting greater self-care as patients can read information in their own time and carry out further research through digital signposting to other articles, guidance, videos etc. GPNs frequently said this was vital for patients managing long-term conditions.
4. consistent professional approach to TECS by practice nurses and other clinicians across the health economy	A common theme in the responses was the need to professionally engage and understand TECS because they recognised they were becoming an important part of general practice. GPNs gained from the peer support of the ALS sessions. They raise the need to be able to confidently signpost colleagues and patients to trusted resources and/or best practice guidance. The importance of working with the wider practice team and being able to share learning was also recognised as essential.
5. enthusiastic clinical engagement in digital delivery of practice nursing care	Feedback on the experience of the course and the impact it could have on GPN practice were strong throughout the surveys. The baseline score in the digital literacy survey was high, which supports the hypothesis that GPNs are enthusiastic about the potential of TECS and already understand the value; it is knowledge and confidence that need to be developed.
6. embed the use of TECS to become standardised practice for delivery of care for LTCs and adverse lifestyle habits	Most GPNs has begun to embed the use of TECS in their practice. The data were collected before there had been sufficient time for the use of TECS to become standard practice for patients managing multiple long-term conditions, but the findings were positive about the response from clinicians and patients to playing an important role in their care in the future. The use of TECS in health was an expectation of many (younger) patients. The response from older patients was more mixed; some were positive whilst some felt wary or that it was not something they would engage with, instead preferring to continue the traditional relationship with clinicians.
7. creation of GPN digital champions nationally.	The findings of this report – which looked at eight cohorts of GPNs from four regions of England – demonstrate that it is possible to work with GPNs using the ALS approach to upskill them and build confidence to become digital champions. GPNs are well-placed within the general practice team to lead on digital transformation initiatives but support from the practice team/GPs is also critical.

Introduction

In 2018, the Northern Staffordshire technology enabled care services (TECS) programme team delivered a pilot in Staffordshire that aimed to upskill general practice nurses (GPNs) so that they were able to promote the use of digital technology to patients to support their care.⁴ An [action learning set approach](#) (ALS)⁵ was used to deliver training to pilot participants.⁶ The learning was intended to create digital nurse champions in primary care who could encourage and explain the use of a range of digital solutions such as GP online services, health apps, social media and closed online community groups (for example, hosted on Facebook, Whatsapp etc). It was hypothesised that doing so would lead to improved outcomes, improved ability to self-care, improved access to relevant and useful information, a reduction in the number of face-to-face appointments creating more capacity, the promotion of prevention as an intervention and a demonstration of the value of technology enabled care services. The Staffordshire programme ran from March–November 2018.

Following the success of the pilot, it was agreed that the programme be rolled out nationally to GPNs across the four regional GPN delivery boards.^{6,7,8,9,10} The approach used the same action learning set methodology and aimed to create digital GPN champions in the selected areas. The ALS session work was funded by NHS England’s Nurse Transformation Fund (associated with the GP Forward View) and was delivered by the Northern Staffordshire TECS programme team. The RCGP was approached to conduct a thematic analysis of survey data collected following the delivery of the national ALS sessions and to produce a report of key findings. The final report is a collaboration between the RCGP’s Innovation team and the North Staffs TECS programme team.

Programme aims

The overarching aim of the programme was to upskill GPNs to become digital champions for TECS in order to build knowledge and confidence to lead on the adoption of digital technology in their practice. To help understand whether this aim had been met the following objectives were set out:

1. increased use of public and closed Facebook functionality to support patients with long term conditions
2. improved access to service information by patients
3. increase in access to self-care information and then shared management of long term condition
4. consistent professional approach to TECS by practice nurses and other clinicians across the health economy
5. enthusiastic clinical engagement in digital delivery of practice nursing care
6. embed the use of TECS to become standardised practice for delivery of care for LTCs and adverse lifestyle habits
7. creation of GPN digital champions nationally.

⁴ CliniTECS [Internet].

⁵ CliniTECS [Internet]. *ALS action plan template*.

⁶ Chambers R, Schmid M. *Making technology-enabled health care work in general practice*. BJGP

⁷ Chambers R, Cox T, Hughes A, Schmid M. *Technology enabled care services for patients with long-term conditions*.

⁸ Chambers R, Hughes A, Beaney P, Schmid M. *You too can be a digital practice nurse champion*.

⁹ Johnson K, Johnstone H, McGougan T. *The role of technology-enabled care in high-quality patient care*.

¹⁰ Chambers R, McKinney R, Schmid M et al. *Digital by choice: becoming part of a digitally ready general practice team*.

Methodology

The following chapter sets out the approach used by the Northern Staffordshire TECS programme team to deliver the action learning sets to eight cohorts of GPNs in Winter/Spring 2018/19. It also includes information on how the analysis was carried out. More detail information on the ALS method is available on the [CliniTECS website](#).¹¹

Participation

The 2018 pilot programme demonstrated that it was possible to use an ALS approach to upskill GPNs to become digital champions for TECS in order to build knowledge and confidence to lead on the adoption of digital technology in their practice. The next phase of the programme was to extend it across four GPN delivery boards. The following STP/CCG areas were selected for the eight cohorts of GPNs:

Area	Total number of participating GPNs	Date of first ALS sessions	Date of second ALS sessions
London South East	21 GPNs Cohorts 1 & 2	November 2018	January 2019
Birmingham Solihull	20 GPNs Cohorts 3 & 4	January 2019	March 2019
Lancashire	20 GPNs Cohorts 5 & 6	November 2018	March 2019
Dorset	16 GPNs Cohorts 7 & 8	January and February 2019	March and April 2019

A total of 77 GPNs undertook the programme; 75 participants successfully completed it. Findings from data collected from the latter are presented in this report.

Development of ALS approach

When developing the ALS session, the TECS programme team reviewed the [NICE Evidence Standards Framework for Digital Health Technologies](#).¹² This describes an evidence standards framework for digital health technologies (DHTs) that should be available, or developed, for DHTs to demonstrate their value in the UK health and care system and considered this when promoting modes of TECS.

Participant Support

GPN cohorts were supported between the two action learning sets and for a period of eight weeks following the final session with the implementation of the TECS. All participants were asked to identify two modes of TECS that they would implement following the first session and were asked to complete an action plan detailing their choice. This was reviewed by the programme manager and digital nurse. Individual support was provided to each nurse to help them to implement their chosen modes of TECS and to help promote TECS to their patients. Redmoor Health were available to offer technical support and digital expertise to participants (e.g. setting up practice Facebook pages, troubleshooting any digital issues with the equipment, as well as working alongside the programme team to provide the

¹¹ CliniTECS [Internet]. *Upskilling clinicians and patients*.

¹² NICE. *Evidence standards framework for digital health technologies*.

skills for the GPNs to use social media, video consultation and apps for engaging with patients).

The digital nurse worked closely with the participants to ensure they were engaged and confident with their chosen form of TECS and able to embed this into their daily working life, assisting with practice concerns and providing ongoing support throughout the programme in a primary care setting.

Participant Resources

Each participant received the necessary delegate pack at session one, which included the required equipment and educational resources for their learning:

- Tablet with the key apps loaded (Facebook, WhatsApp, Manage Your Health)
- Data sim card, (data prepaid for 12 months) with a phone number to ensure internet connectivity wherever the site of care and to allow the nurses to use the tablet independently of their practice.
- Digital Handbook – *Making Digital Healthcare Happen in Practice*¹³
- Learning Document – produced by the TECS programme team
- Action Plan template
- Access to 52 ‘how to do TECS’ videos
- Leading Change Adding Value template (national template adapted for digital relevance)
- Digital literacy questionnaire

In addition, each nurse was provided with a bursary paid in two instalments (the final instalment to be released after successful completion of the course and completion of the 30-minute evaluation call).

Recruitment and selection

It was agreed that the recruitment for the nurses would be undertaken via a local nurse lead – identified through the regional GPN Board. The project team were connected with the leads via the national contacts and shared all of the necessary documents for the course. Practice nurses, advanced nurse practitioners (ANPs) and health care assistants (HCAs) who wanted to participate were asked to complete an application form, co-signed by practice leads and then placed within the closest group to where they were based.

The Action Learning Sets

ALS sessions for each cohort were hosted locally in a central location for each respective cohort. Each ALS had two face-to-face sessions focused on the adoption and embedding of TECS in practice nursing, including:

- Mobile health apps
- Public Facebook pages and closed Facebook groups for patients with LTCs / pre-conditions / population health messages
- Telehealth – if available locally
- Video consultations
- GP online services e.g. Patient Online
- Use of secure messaging

¹³ Chambers R, Schmid M, Jabbouri A, Beaney P. *Making digital healthcare happen in practice: a practical handbook*.

ALS sessions were scheduled from 6.00pm – 8.00pm, with refreshments and networking provided from 5.30pm to encourage nurses to network and discuss any issues / concerns prior to the session. Each cohort met twice during a period of four months with eight weeks between each meeting. Evaluation calls were scheduled eight weeks following the final meeting. It was agreed that the team would provide remote support to the participants between the first session until the evaluation call (a period of approx. 16 weeks).

All GPNs were asked to complete and submit their action plan to the session leads for review and discussion. This allowed them to begin implementing their chosen forms of TECS immediately and enabled them to review their progress at session two. Session two incorporated a reflective session where all the participants could review their successes and any lessons learned and discuss ways to overcome barriers.

Each GPN completed a digital literacy questionnaire at both sessions to review their digital confidence.

Support outside of the ALS meetings

In order for the successful completion of the course, individualised support was provided outside of the ALS sessions. This ranged from help completing the action plan and LCAV to discussing the various ways to use TECS for specific conditions from the team, to support setting up practice Facebook pages and/or other forms of TECS to discuss the benefits with the wider practice team.

The team engaged with nurses if required on an individual basis via video consultation / phone calls / WhatsApp messaging / emails etc. Redmoor Health provided the technical and practical support to participants to set up public Facebook pages and closed Facebook groups.

The TECS programme team established a review team who provided clinical and quality assurance on any animations that were created – this consisted of Dr Ruth Chambers, Ann Hughes and Kellie Johnson (Staffordshire CCGs Quality and Safety Nurse Lead Manager).

A large proportion of the nurses requested patient leaflets for promotion and information in practice – particularly for the Manage Your Health app and other easily accessible apps through the NHS England, Public Health England app pages / stores. The TECS programme team commissioned some simple and concise flyers and bookmarks on available apps. All nurses received a copy of these in their welcome pack and were able to request more copies for their practice if required. The team highlighted various ways social media could be promoted – via simple posters, advertisements on their websites or on their electronic screens in the waiting rooms.

Analysis of the GPN evaluations

Following the completion of the telephone evaluation three datasets were provided to the RCGP Innovation team. These were collected through the following surveys:

1. The digital literacy baseline and follow-up surveys
2. The Leading Change and Adding Value questionnaire (LCAV)
3. The telephone survey with participants following the completion of the ALS

The digital literacy data were predominately quantitative data and required little cleaning. The data – all cohorts, baseline and follow-up – were collated in order to make individual comparisons possible, as well as making it easier to produce averages.

The LCAV data were the most complex. The thematic analysis involved collating the different cohorts and separating each set of questions (multiple questions were asked within each theme of the framework). Each set of questions were reviewed, and themes were synthesised. Each set of themes were graded (using a RAG rating for frequency) and then collated into eight overarching topics. In doing so it was possible to discuss the LCAV in terms of key topics but still highlight particularly common themes or golden threads. It was also possible to have a sense of what the most frequently referenced areas are.

The telephone survey was written with five overarching topics and questions related to each. As above, cohort data were collated, and themes were synthesised for each question. As the topics were prescribed as part of the original survey, the findings for each topic are presented in this pre-existing framework.

Findings and discussion

This chapter is broken down into four sections presenting a summary of the findings from the following:

1. Summary of course completion and response rates
2. Digital literacy baseline and follow-up surveys
3. Leading Change and Added Value questionnaire (LCAV)
4. Telephone survey with participants following the completion of the ALS

With the exception of the first, each section includes key findings, a summary of the findings and a discussion section which interprets the findings. The LCAV and telephone survey sections also include conclusions. Quantitative results are presented in tables with relevant caveats to aid understanding and reduce ambiguity.

Summary of course completion and response rates

Findings analysed in this report were taken from the eight participating ALS cohorts from London, Birmingham, Dorset and Lancashire. The course completion rate was very high (97%) and response rates were very good (digital literacy surveys:100%; LCAV: 79%; telephone evaluation: 93%).

The LCAV response was the lowest. This is most likely due to the fact that it was the most onerous to complete as it required detailed written responses. High response rates might be explained in part by how positively the ALS training was received and engaged with, and the hard work and support of the ALS team to encourage all participants to provide feedback.

Table 1: summary of course completion and response rates

This table presents the number of GPNs who started and completed the ALS course, and the number of responses to each of the surveys by cohort

	No. participants who started course	No. participants who completed course	Digital literacy 1 – baseline survey	Digital literacy 2 – follow-up survey	LCAVs	Telephone evaluation
London SE	21	21	21	21	12	21
Birmingham	20	20	20	20	20	20
Dorset	16	16	16	16	12	12
Lancs	20	18	20	18	18	17
<i>Total</i>	77	75	77	75	59	70

Digital literacy baseline and follow-up surveys

Key findings

1. The digital literacy survey demonstrates positive improvements amongst GPNs around support for, understanding and confidence of digital technology in their practice as a result of participating in the ALS sessions.
2. The biggest area of improvement was seen in how often GPNs used digital technology in their practice at work. The average (mode) score increased by two points (from 2 to 4) between surveys; 79% of GPNs reported that they increased the frequency with which they used digital technology in practice.
3. The average score for how supported GPNs felt by their practice to incorporate digital technology into their work increased by one point (from 3 to 4) between ALS sessions.
4. There was also marked improvement in GPNs around having confidence to make a short video each month reflecting on their experiences of becoming a digital nurse champion. The average score increased by two points (from 2 to 4) between surveys and 71% of GPNs' self-reported score improved between surveys.
5. 91% of GPNs said they were 'digitally leading or ready' in the follow-up compared with 56% in the baseline – an increase of 35% between ALS sessions.
6. 51% of GPNs reported an increase in confidence to support colleagues to incorporate technology-enabled care and 44% felt the same level of confidence in the follow-up as in the baseline survey.
7. GPNs reported an increase of traditional digital solutions (e.g. websites, email, telephone, texts) suggesting that these options were not being used effectively and the ALS sessions helped to clarify the benefits and best practice uses of these solutions.
8. A significant proportion of GPNs reported that they believe in the potential positive impact (53%) and the benefit (68%) of digital technology. This supports the hypothesis that GPNs are well-placed within the practice to lead on and champion digital solutions.

The digital literacy surveys were completed by participants in each ALS session. The results are presented across 12 tables. Each table compares results from the initial baseline survey with the follow-up survey. Explanations of the data presented are included in each table.

Table 2: Comparison of average scores

This table compares the average (mode) score between the baseline and follow-up surveys for each applicable question.

		Baseline survey average (mode)	Follow-up survey average (mode)
1	How often do you use digital technology e.g. apps, Telehealth - in your practice at work?	2	4
3	Which of the following statements do you agree with: 'Digital technology, data and information will.....'	5	5
4	To what extent do you agree with the following statement: 'My organisation supports its nurses to be proficient in and make good use of all digital care services.'	4	4
5	To what extent does this statement reflect your view: 'My practice supports me to have protected time to incorporate digital technology into my practice.'	3	4
8	To what extent does this statement reflect your view: 'I feel confident that I could share my knowledge of the use of technology-enabled health care with colleagues to help them incorporate digital technology in their practice.'	4	4
9	To what extent do you agree with the following statement: 'I can see the benefit of using technology-enabled health care for my patients and my fellow practice nurses/GPs'	5	5
10	How confident are you to make a short video each month reflecting on your experience of becoming a digital nurse champion?	2	4

Questions two, six and seven are not applicable and have been omitted.

Table 3: Summary of findings of the digital literacy surveys

This table summarises the number of GPNs whose responses in the follow-up survey had improved, remain unchanged or worsened when compared with their responses in the baseline survey.

	Number of GPNs whose score improved		Number of GPNs whose score remained unchanged		Number of GPNs whose score worsened	
	%	n=	%	n=	%	n=
1 How often do you use digital technology e.g. apps, Telehealth - in your practice at work?	79	61	16	12	5	4
2 Which of the following statements most closely describes how you feel in relation to using digital technology as part of your practice?	57	43	37	28	5	4
3 Which of the following statements do you agree with: 'Digital technology, data and information will.....'	34	26	52	40	14	11
4 To what extent do you agree with the following statement: 'My organisation supports its nurses to be proficient in and make good use of all digital care services.'	52	40	38	29	10	8
5 To what extent does this statement reflect your view: 'My practice supports me to have protected time to incorporate digital technology into my practice.'	53	41	29	22	18	14
8 To what extent does this statement reflect your view: 'I feel confident that I could share my knowledge of the use of technology-enabled health care with colleagues to help them incorporate digital technology in their practice.'	51	39	44	34	5	4
9 To what extent do you agree with the following statement: 'I can see the benefit of using technology-enabled health care for my patients and my fellow practice nurses/GPs'	25	19	70	54	5	4
10 How confident are you to make a short video each month reflecting on your experience of becoming a digital nurse champion?	71	55	18	14	10	8

Questions two, six and seven are not applicable and have been omitted.

Table 4: Estimated frequency of use of digital technology

GPN responses to the question 'How often do you use digital technology e.g. apps, Telehealth - in your practice at work?'

	Baseline survey		Follow-up survey	
	%	n=	%	n=
5 – 100% of the time	3	2	21	16
4 – 75% of the time	8	6	31	23
3 – 50% of the time	28	21	29	22
2 – 25% of the time	36	27	19	14
1 – Never	25	19	0	0

Table 5: GPN confidence in relation to using digital technology as part of their practice

GPN responses to the question 'Which of the following statements most closely describes how you feel in relation to using digital technology as part of your practice?'

	Baseline survey		Follow-up survey	
	%	n=	%	n=
Leading	7	5	29	22
Ready	49	37	61	46
Worried	43	32	9	7
Lost	1	1	0	0

Two GPNs did not respond to the follow-up survey so their response has been omitted from the baseline

Table 6: Perception of contribution of digital technology, data and information

GPN responses to the question 'Which of the following statements do you agree with: 'Digital technology, data and information will.....''

	Baseline survey		Follow-up survey	
	%	n=	%	n=
5 – Make a large positive contribution	53	40	76	57
4 – Make a small positive contribution	39	29	23	17
3 – Make no difference	7	5	1	1
2 – Make a small negative contribution	1	1	0	0
1 – Make a large negative contribution	0	0	0	0

Table 7: Practice support of GPNs to make good use of digital care services

GPN responses to the question 'To what extent do you agree with the following statement: 'My organisation supports its nurses to be proficient in and make good use of all digital care services.''

	Baseline survey		Follow-up survey	
	%	n=	%	n=
5 – strongly agree	15	11	39	29
4 – somewhat agree	40	30	47	35
3 – neutral	39	29	13	10
2 – somewhat disagree	4	3	1	1
1 – strongly disagree	3	2	0	0

Table 8: Protected time to incorporate digital technology

GPN responses to the question 'To what extent does this statement reflect your view: 'My practice supports me to have protected time to incorporate digital technology into my practice.''

	Baseline survey		Follow-up survey	
	%	n=	%	n=
5 – strongly agree	9	7	17	13
4 – somewhat agree	19	14	39	29
3 – neutral	47	35	32	24
2 – somewhat disagree	16	12	12	9
1 – strongly disagree	9	7	0	0

Table 9: GPN familiarity with different types of digital technology*

Grouped free-text responses to the question 'Please list forms of digital technology you have used before (in your everyday life or at work) e.g. Skype, apps, social media i.e. Facebook, telehealth, other?'

	Baseline survey	Follow-up survey
Apps	32	46
Social media (e.g. Facebook, Whatsapp, Instagram, Twitter)	85	75
Video (e.g. Facetime, Skype)	25	30
Traditional (e.g. websites, email, telephone, texts)	18	54
None	2	0

Table 10: GPN confidence with different types of digital technology*

Grouped free-text responses to the question 'Please list which of these forms of digital technology you would feel confident to use as part of your current practice?'

	Baseline survey	Follow-up survey
Apps	26	51
Social media (e.g. Facebook, Whatsapp, Instagram, Twitter)	62	69
Video (e.g. Facetime, Skype)	22	30
Traditional (e.g. websites, email, telephone, texts)	32	79
None	15	0

*collated top responses and not all responses

Table 11: GPN confidence to support colleagues to incorporate digital technology in their practice

GPN responses to the question ‘To what extent does this statement reflect your view: ‘I feel confident that I could share my knowledge of the use of technology-enabled health care with colleagues to help them incorporate digital technology in their practice.’

	Baseline survey		Follow-up survey	
	%	n=	%	n=
5 – strongly agree	16	12	44	33
4 – somewhat agree	48	36	53	40
3 – neutral	23	17	3	2
2 – somewhat disagree	8	6	0	0
1 – strongly disagree	5	4	0	0

Table 12: Perception of benefit of technology-enabled care

GPN responses to the question ‘To what extent do you agree with the following statement: ‘I can see the benefit of using technology-enabled health care for my patients and my fellow practice nurses/GPs’

	Baseline survey		Follow-up survey	
	%	n=	%	n=
5 – strongly agree	67	50	88	66
4 – somewhat agree	28	21	12	9
3 – neutral	5	4	0	0
2 – somewhat disagree	0	0	0	0
1 – strongly disagree	0	0	0	0

Table 13: GPN confidence to make short monthly video on experiences of becoming a digital nurse champion

GPN responses to the question ‘How confident are you to make a short video each month reflecting on your experience of becoming a digital nurse champion?’

	Baseline survey		Follow-up survey	
	%	n=	%	n=
5 – completely confident	1	1	12	9
4 – somewhat confident	20	15	47	35
3 – neutral	25	19	32	24
2 – somewhat unconfident	36	27	9	7
1 – completely unconfident	17	13	0	0

Discussion

The results of the digital literacy surveys demonstrate positive improvements amongst GPNs with regard to use, support for, understanding of and confidence around digital technology in their practice as a result of participating in the ALS sessions. However, some areas have improved more markedly than others.

The biggest improvement between the baseline line and follow-up concerned how often GPNs used digital technology in their practice at work. The average (mode) score increased by two points (from 2 to 4) between surveys; 79% of GPNs reported that they increased the frequency with which they used digital technology in practice. These findings demonstrate that GPNs had begun to use digital solutions more following the first ALS session. The ALS sessions achieved the aim of raising awareness of digital options for GPNs and building confidence to use and champion them.

How supported GPNs felt by their practice to incorporate digital technology into their work also increased by one point (from 3 to 4). Factors that may have contributed to this include an increase in feelings of confidence following the ALS sessions. Having a clearer understanding of the 'ask' of GP partners (e.g. expected benefits, reasons to change, how to implement) and feeling better able and equipped to communicate this to the GP team may also have resulted in the increased scores.

There was some resistance from GP partners and colleagues to change practice, although this was reported by a very small number of GPNs. It is possible that the baseline score was lower because the GPNs had not had conversations about protecting time to implement digital solutions and their responses erred towards a neutral score (i.e. 3). Once they were clearer about the support they needed as a result of attending the first ALS, they were able to obtain it and thereby reported a higher score in the subsequent survey.

Another area where marked improvement was seen around GPN confidence to make a short video each month reflecting on their experiences of becoming a digital nurse champion. The average score increased by two points (from 2 to 4) between surveys and 71% of GPNs' self-reported score improved between surveys. This is most likely because this task was a specific area of focus, with dedicated support provided in and between the ALS sessions to enable GPNs to effectively and confidently create videos where they had not done previously.

All other average scores remained the same between baseline and follow-up survey. However, individual responses for questions 2, 4, 5 and 8 show that between 51-57% of GPNs reported an improvement on their baseline score. This is a significant proportion of participants. Looking further at this area, when describing how they felt about using digital technology as part of their practices, 91% of GPNs said they were 'digitally leading or ready' in the follow-up compared with 56% in the baseline – an increase of 35% between ALS sessions.

An area that could benefit from greater focus is around GPN confidence (question 8). Whilst 51% of GPNs reported an increase in confidence to support colleagues to incorporate TECS – a notable proportion – 44% felt the same level of confidence in the follow-up as in the baseline survey. This is worth highlighting because confidence is key to enabling GPNs to be effective digital champions.

Questions 6 and 7 aimed to understand the forms of digital technology that GPNs have used previously (in everyday life as well as work) and which they feel confident in using in their practice. Responses to these questions were a challenge to group and analyse as they were free-text and not

always clear. Tables 5 and 6 present collated top responses as a snapshot though some responses have been omitted when cleaning the data. Both show an increase in the number of GPNs prepared to use apps. However, this could be because they had a better understanding of what was meant by 'app' following the first ALS session, which thereby skewed responses in the follow-up survey. The drop in the use of social media (Table 5) supports this theory. Both tables also show a marked increase in the use of 'traditional' technology – which might suggest that currently available options were not being utilised effectively and the ALS sessions helped to clarify the benefits and best practice uses of these solutions. This is helpful as it may remove some barriers in terms of implementing change at a wider scale. Rather than a paradigm shift, general practice teams are being encouraged to utilise those traditional digital methods more and in different ways. This could therefore be a quick win for GPNs trying to implement learning between future ALS sessions.

The direct comparisons between responses highlighted above demonstrate consistent improvements on an individual level. It is possible that had there been a third ALS session or a longer period for GPNs to embed the learning in their practice – something that a significant number of GPNs commented upon in the LCAV – the increase in individual and average scores would have been greater.

A key explanation for the similarity between baseline and follow-up average scores is because the majority of GPNs scored positively in the baseline. For instance, half of GPNs (53%) said that digital technology, data and information will 'make a large positive contribution' in the baseline survey. And 68% of GPNs strongly agreed that they could see the benefit of using TECS for their patients and fellow practice nurses/GPs in the baseline. The individual responses to both these questions also had the largest proportion of GPNs whose score remained unchanged (52% and 50% respectively). This is potentially because of GPN recruitment to the ALS course; those who are already digitally curious were more likely to apply and therefore score more positively in the baseline survey (and the ALS team had no control over who applied). So, whilst this might have been the case, the primary method of recruitment to the programme was through the GPN delivery boards identifying a local lead in each region. It is unlikely this would result in only the digitally positive - and many GPNs were sceptical at the beginning of the course – but it does not eliminate the potential bias.

Taken at face value this suggests two things: (1) the average scores were very positive at the baseline snapshot and did not have a huge amount of room to improve; and (2) the hypothesis that GPNs are best placed within the practice to lead on and champion digital solutions is supported by the findings because they already believe it can have a positive impact on patients and GP teams. Even with the caveat that GPNs who were already interested in digital may have joined the programme, the point is that they are still taking part in the upskilling and taking responsibility for embedding it within their practice after the training has ended. The challenge is to enable them to effectively carry out that role by raising awareness of safe digital technology options, building confidence and providing them with the information to influence senior colleagues and team members.

Leading Change, Adding Value (LCAV) – key findings

Key findings

1. Prior to the ALS sessions, GPNs relied mostly on traditional methods (e.g. telephone bookings, hardcopy information, letters etc). When digital solutions were used it was often on an ad hoc basis only.
2. GP / staff buy-in or ‘winning hearts and minds’ was frequently raised as key to making progress in embedding TECS within their practice
3. Making small but steady, manageable changes and being a source of support for colleagues were important to successfully embedding change.
4. The implementation of digital solutions has improved consultations and resulted in patients being more engaged in their care.
5. Use of social media resulted in improvements in engagement with harder to reach groups and groups who had historically had poorer engagement
6. Setting up a social media presence was a good first step as a digital champion, it was relatively easy to do and a quick win to build confidence.
7. Improved access to information through the use of TECS primarily plays a key role in empowering the patient by enabling greater self-care and building their knowledge of their health issues. This in turn enables them to have more productive consultations.
8. Building knowledge and confidence around TECS was recognised as an important outcome of the ALS sessions. Following time on the course learning about and implementing digital solutions, GPNs reported this was easier than had been expected.
9. Changes implemented following the ALS sessions received positive feedback from patients.

Leading Change, Adding Value (LCAV) is a national framework for all nursing, midwifery and care staff that can be used to lead on delivering better outcomes, better experiences for patients and staff, and better use of resources.¹⁴ It highlights the need to focus on unwarranted variation – differences in health and care outcomes, patients’ experience and use of resources that cannot be justified by reasons of where we live, population type or infrastructure.

A thematic analysis was carried out on responses to each set of questions. This involved reviewing responses, developing a series of themes and tallying the frequency of each theme. This process was applied to all questions where participants were able to provide a free text-style response.

Themes were sorted into most frequently occurring to least frequently occurring for each question and then reviewed and collated as a whole into eight topics. The headings below are presented in order of most frequently raised by the respondents and take into account recurring themes throughout the framework, as opposed to using a question-by-question approach.

¹⁴ NHS England (2016). *Leading Change, Adding Value*.

GPNs as champions for digital change

“This action learning has been a revelation of how healthcare can change in the future. I hope to continue to champion it in my organisation.” [Nurse 3, Birmingham]

The overarching aim of the programme was to run ALS sessions for GPNs to enable them to adopt and embed TECS within their general practices and become digital GPN champions in their own practice. A strong recurring theme through the LCAV responses from the eight cohorts is how they were able to realise this in their practice.

Thematic discussion points within this topic include many references to the importance of working with their wider practice team to support change. GP and staff buy-in or ‘winning hearts and minds’ were frequently raised as key to the progress they have made embedding TECS within their practice since beginning the ALS sessions. In particular, a senior GP who can champion in the approach is very useful. Some GPNs went further by suggesting seeking support from outside the team (e.g. from the PPG) has helped with the gradual culture change.

How this change is presented to colleagues is also important; GPNs raised being clear about the potential benefits of TECS so that these can be either promoted to the team or used to convince the sceptics of the need to go forward with changes. Important benefits included not just better patient experience but better experience and time-saving for clinicians and staff. And the need to be open-minded to concerns and positive in outlook were also frequently referred to as important, particularly as many GPNs recognised that an environment with heavy workload pressures is not ideal for what may be perceived by many as a paradigm shift. Several GPNs said that it was important to make small but steady, manageable changes and to be prepared to support colleagues.

In a questionnaire based on understanding the impact of learning to become an effective digital GPN champion, it is not surprising that *how* to be an effective digital champion was one of the main recurring topics. But this helps us understand what a successful GPN looks like: they are knowledgeable about the potential of TECS for patients and colleagues; they have a positive and supportive attitude to helping colleagues change and recognise the importance for gaining support from across the GP team; they are patient and support gradual adoption.

Communication and engagement

“[We have used TECS] as a way to target certain groups, such as those that hadn’t attended for their cervical smear test. Introducing a Facebook, Instagram and Twitter page[s] has proved very useful to [g]et the messages across to these patients.” [Nurse 11, London]

Communication and engagement were frequently discussed in GPN responses. This topic covers a number of areas including appointments, patient-clinician relationship, online engagement and the online presence of the practice.

Many GPNs said that the implementation of digital solutions had improved consultations and that they had noticed that patients were more engaged in their care. They had helped facilitate conversations (e.g. by using an app, signposting to online information resources) which enabled patients to come to appointments better prepared, resulting in better quality appointments. This was particularly true for specific patient cohorts (e.g. people with type 2 diabetes, asthma etc) where the GPN had initially focused on implementing the use of TECS. The use of TECS became routine and

enabled family and/or carers to be more involved in their care, where appropriate. Improved communication and better patient engagement were frequently reported by respondents.

This was also true of communication and engagement online or outside of traditional face-to-face appointments. GPNs felt that it was much easier to engage with different cohorts of patients and signpost them to relevant information to them. GPNs frequently reported improvements with hard to reach groups or groups with poor engagement (e.g. cervical screening age group). Some GPNs were able to set up closed groups (e.g. on Facebook) for these groups enabling patients to connect with each other. Better use of existing digital infrastructure was also important. For instance, using GP online services helped patients with appointment bookings and cancellations; better understanding of the utility of these services has had a positive impact on practice and patients.

GPNs also reported that they were able to provide clearer, more accurate and more up-to-date information online to patients because of improvements made to their online presence. Many participants created a social media page and started monitoring and promoting this; texting was also used to communicate with difficult to reach patients and reduce DNA rates. They have been able to use the online presence to build online followings and provide information about the practice directly to patients. The platform also enables the promotion of various apps and information websites. Many GPNs recognised that setting up a social media presence was a good first step as a digital champion as it is relatively easy to do and is a quick win.

The biggest areas of impact reported by participants following implementation of TECS is in communication and engagement with patients. TECS have strengthened the patient-clinician relationship by empowering patients to take more active involvement in their own health and care, and to be prepared for meetings, resulting in a better-quality consultation. GPNs have been able to engage with difficult to reach cohorts of patients through texting and social media. And they are able to provide more accurate information to the patients that follow them online.

Challenges to overcome

“In daily life I see the surge and potential of technology, patients access all sorts of internet sources which are sometimes unhelpful. I wanted to see what was out there and differentiate between good and bad and promote the best to improve health and wellbeing.” [Nurse 1, London]

Prior to the ALS sessions, GPNs were aware of a number of challenges which TECS should be able to address. This included poor or a lack of social media presence, an out-of-date website with inaccurate information and difficulty for patients booking appointments by telephone. The need to convey a lot of information within a limited amount of time and the effectiveness of leaflets or other traditional signposting methods were highlighted as significant challenges. Furthermore, the time-pressured appointments meant that the scope for appointments being an opportunity to have genuine conversations about patients' health and encouraging greater self-care was often not possible. And clinicians have a limited number of practical tools to provide to patients to enable self-care. There was almost always a reliance on paper-based and traditional methods of communication. When digital solutions were used it was often on an ad hoc basis.

When attempting to embed the learning from the ALS sessions in their practice, GPNs encountered a further set of challenges, which were more related to culture and attitude. Typically, this was in relation to incorporating digital approaches with traditional methods and frustrated by low confidence or, occasionally, hostility toward the use of TECS. Very few GPNs reported that the latter

was the case but the importance of gaining wide buy-in and being able to clearly articulate benefits was emphasised throughout, as discussed above. There were some concerns around compliance with information governance and the need for digital solutions to complement practice policies and procedures. GPNs acknowledged the learning curve for colleagues and for patients when introducing the use of TECS and to start small and gradually implement them in a manageable way. A challenge from a programme perspective was that at the time GPNs reported on progress there had not been enough time to implement changes and collect data – but they were mostly positive that this would come in time and would help strengthen the case for greater use of TECS. Another common issue was that of some practices undergoing significant changes or QOF process.

The risk of the digital exclusion of older patients or patients not comfortable using TECS also came up. This is an important challenge to manage but it was reported by a small proportion of GPNs, whereas most responses in relation to patient feedback were very positive.

Access to information and services

“I am really pleased I signed up to be a digital nurse champion, not only do I feel it has been beneficial to my patients it has also been beneficial to me (I wasn’t aware some of these Apps existed) , and lastly hopefully in the long run the surgery will too benefit if it helps to free up some appointments when other resources can be used.” [Nurse 11, London]

There were many comments about patient access to information. GPNs reported that improved access to information through the use of TECS had many benefits for patients but primarily it plays a key role in empowering the patient by enabling greater self-care and building their knowledge of their health issues, which in turn has enabled them to have more productive consultations.

There are a number of reasons for this. Signposting to online information in an easily communicable digital format means that patients can read information in their own time and in their own way. If they are interested in delving deeper into a subject most information resources have further signposting (e.g. nhs.uk information on type 2 diabetes signposts to Diabetes UK for further information). Furthermore, trustworthy online resources tend to have more accurate information because they are kept up-to-date. GPNs reported that part of their role as a digital champion was to be able to help patients to identify or differentiate good information resources, apps etc. Signposting to online resources also means it is easier to share information with carers and/or family members involved in patients’ care.

Access to services was reported much less than access to information and tools but is referenced enough to warrant discussing briefly. The key theme was the importance of being able to provide more choice to patients; younger and busy professionals liked the use of digital solutions because they found them easy and convenient to use (after some guidance from the GPN or reception staff) and a small number of GPNs reported an increase in non-face-to-face or non-traditional appointments. And digital methods of appointment booking and cancellation, prescriptions, check-in processes and SMS messaging have helped lessen the pressure on the practice. Whilst acknowledging the risk of digital exclusion, greater use of TECS could mean there is more appointment capacity for those that need it and/or prefer more traditional method of booking appointments and seeing a GP or GPN.

Increased confidence and knowledge

“On a personal level I felt that I should be able to use more technology, but I lacked confidence”
[Nurse 12, Birmingham]

An important part of the ALS sessions and upskilling GPNs to become digital champions was to build confidence and increase knowledge. As discussed above, GPNs needed to influence and support colleagues when adopting TECS in order to promote the benefits and win hearts and minds (as well as feel they could talk to patients competently about them). Building knowledge of digital solutions and confidence was therefore important and several GPNs reported feeling that this was an outcome of the ALS sessions.

Typically, they commented that, following time on the course learning about and implementing digital solutions, it was actually not as difficult as they had initially expected. The need to maintain or increase professional awareness of TECS to avoid becoming digitally isolated so that they can meet the needs of a younger or more digitally-aware population was also a recurring theme and the vast majority of participants of the course felt that the course had impacted them positively.

Very few GPNs reported that they had had technical or IT-related issues when implementing their chosen digital solutions, which is a very positive learning outcome of ALS sessions.

Patient feedback

“Patients have said that they love the mycopd app and have felt it has helped with their pulmonary rehabilitation.” [Nurse 18, Lancashire]

The majority of GPNs reported that changes they had implemented following the ALS sessions had received positive feedback from patients, albeit anecdotally in consultations, as there had not been enough time to conduct a survey at the time GPNs were asked to respond to the LCAV questionnaire. GPNs also specifically reported positive feedback from patients who manage multiple long-term conditions, younger people and working people though some noted that some of their older patients were more wary.

One issue with the positive patient feedback is that all GPNs implemented different digital solutions and at a different pace. So very positive patient feedback for one practice might be based on the implementation of a health management app, improved social media and greater use of GP online services whereas the same feedback for another practice might be based on a single or much smaller change; the thematic analysis does not grade feedback.

Patient empowerment

“We are involving pts and empowering them to make positive life style choices by using Apps that are simple free and easily accessible.” [Nurse 18, Birmingham]

Another consistently referenced area was that of patient empowerment and how the use of TECS can support patients to take greater control of the management of their health and care (specifically their long-term conditions) which enabled more self-care and a more informed patient. There was unambiguous support from GPNs that TECS supported patients in this way and this is an important outcome.

Efficiencies and positive impact on practice

“Improved patient experience and reduced long queues and congestion at reception with self check-in system. This leaves reception staff more time to deal with complicated queries. Enormous reduction in letters sent to patients since we started using accuRx SMS messaging system...Increased use of online services, e-consult reduces need for face to face appointment and DNAs. As a result reduces waiting time for patients who need to be seen face to face. Staff has more efficient use of their time to focus on patient care.” [Nurse 21, London]

GPNs reported that whilst it was too early to capture conclusive data they were beginning to see some impact from the implementation of TECS within their practice. Some were quite general and talked in terms of efficiencies being realised (e.g. cost / time-savings, reduced pressure on workload). The most common references were to a reduction in did not attend (DNA) rates and reduced pressure on reception staff. And as previously mentioned, staff and the majority of clinicians were positive about the increased use of TECS within the practice.

In terms of overall impact, this area was mentioned less than the confidence building of GPNs, the improvements in communications between GPNs and patients, increased patient engagement and access to information and positive patient feedback. This can be explained by the lack of time to implement changes and capture data before the LCAV questionnaire deadline and could be an area to revisit in future ALS sessions.

LCAV questionnaire conclusion

Responses to the LCAV questionnaire were very positive about its impact on GPNs’ confidence and knowledge, the patient experience and the relationship between patients and their practice. GPNs reported that patients felt better equipped to manage their long-term conditions and to understand their health and care issues.

There was a lot of support for relatively simple changes from traditional to digital methods that made a big impact. For example:

- better promotion of booking and cancelling appointments by using GP online services
- use of trusted health care management apps
- sharing of trusted information digitally
- use of SMS text systems and social media to communicate more effectively.

Whilst there had not been enough time to measure the impact of these changes they were positively received by colleagues, they appeared to be helping to reduce DNAs and pressure on reception staff and were well-received by patients.

There were some challenges for digital nurse champions to overcome – such as winning over sceptical colleagues, protecting time to implement the changes and ensuring that the risk of digital exclusion is minimised – but it is clear from the findings that the ALS sessions contribute to the LCAV’s triple aim of better outcomes, better experiences for patients and staff and better use of resources.

Telephone survey – key findings

Key findings

1. Facebook was by far the most popular form of social media used by GPNs in their roles and almost all GPNs introduced or updated a Facebook page for the practice.
2. Face-to-face consultations were the primary method for introducing or promoting TECS to patients.
3. Understanding the range of digital health solutions available and increasing confidence to use these and champion them were the most important things learnt on the ALS course.
4. The majority of GPNs said they felt confident in promoting TECS to patients following the ALS course
5. The majority of GPNs reported that patients were positive about the use of digital technology in their care
6. GPNs think there are more benefits to using TECS for patients as opposed to clinicians (approximately 35/65 split in favour of patient benefits).
7. Support shown to GPNs in their practice was seen to be the key enabler to success in GPNs implementing the learning from the ALS sessions and using TECS.

The telephone survey was written with five overarching topics and questions related to each. As with the LCAV, cohort data were collated, and themes were synthesised for each question. As the topics were prescribed as part of the original survey, the findings for each topic are presented in this pre-existing framework.

Knowledge

To understand the impact of the ALS sessions on GPN knowledge of TECS, they were asked which ones they choose to implement, how they introduced and promoted them to patients and what they thought was the most important thing they learned from the course.

Virtually all GPNs introduced or updated a Facebook page for the practice. This is by far the most popular form of social media used by GPNs to promote their practice. It demonstrates the principle of making small and steady changes that can have a disproportionately big impact on the patient-practice relationship, communication, engagement and dissemination of information. The Manage Your Health app was also very popular amongst GPNs and in fact many GPNs reported generically that they had used 'apps', though it isn't possible to understand which ones they were using. Less popular but worth mentioning is the use of websites, WhatsApp, video consultations, a tablet in consultations and animations.

The primary method for introducing or promoting TECS to patients was through face-to-face consultations and of these roughly a third of GPNs carried out a demonstration with the patient to help them understand the purpose and use of the digital solution. Whilst this helps us understand the increase in GPN knowledge it also indicates increased confidence. A small number of GPNs said they had had help with promotion from reception staff or other colleagues, and had also handed out leaflets. When not face-to-face with a patient, the most popular method of promotion was through the practice Facebook page, using animations and using SMS text messages.

GPNs felt that the most important things they had learned on the course were the range of available digital health solutions and the increased confidence to use and champion them. Furthermore, they

also better understood the utility of 'everyday' digital solutions and how they can be used effectively in a general practice context. Some GPNs also commented on their greater awareness of the digital transformation of the NHS and the importance of engaging with this.

Confidence

GPNs were asked how confident they felt in promoting TECS to their patients and the majority (94%) said they felt confident. A handful of GPNs said they felt somewhat confident or that they were unsure initially but now felt more confident.

Similarly, when asked whether they felt confident to be a digital champion and promote TECS to other clinicians a similar number of GPNs said yes.

Patient relationship

Again, a similar number of GPNs reported that patients were positive about the use of digital technology in their care. This is based mainly on anecdotal feedback rather than patient surveys and doesn't differentiate between types of technology experienced by patients, but it is nonetheless a response that supports the hypothesis that the use of digital technology is favoured or even expected by patients.

An important concern around the introduction of digital technology is whether it is to the detriment of the clinician-patient relationship; for instance, one GPN in the LCAV reported that an older patient felt like they were being 'brushed off'. GPNs were asked specifically about how using digital technology has affected their relationship with their patients and approximately two-thirds said that there had been a positive impact. The most common reasons for this were because it enables more effective sharing of more accurate information, improved patient engagement and an increase in patient confidence and self-management. Less frequently mentioned reasons included better communication with patients, better consultations, more choice for patients and that it had actually strengthened the clinician-patient relationship.

There were a small but noteworthy number of GPNs that said there had been no impact so far and a very small proportion (approximately 6%) who said that changes had been met with a mixed reception. In such cases, GPNs said that they respected their decision not to engage and continue with traditional approaches.

Attitudes

GPNs were asked what they thought were the main benefits of using digital healthcare solutions for clinicians and for patients. In general, GPNs reported more patient benefits than clinician benefits (approximately 35/65 split in favour of patient benefits).

The most popular response for clinician benefits was that they enabled better consultations. GPNs also said that they helped clinicians better understand the IT and how it could be used, it provided them with another 'tool' in the toolbox, and it helped them engage with hard-to-reach patient cohorts. Also raised is the increased confidence to signpost to find trusted and evidence-based information online.

The most popular benefits for patients – as reported by GPNs – were that they empower patients to greater self-management and offer better and more access to information. Improved communication and engagement, and more choice are also mentioned again.

GPNs were asked what they would change if they repeated the process of implementing changes. The majority said they would not make any changes. A small number said that they would engage more with the wider practice team; this was raised repeatedly as key to success in the LCAV questionnaire responses.

Practice relationship

GPNs were asked how supportive their practice had been when they were trying to implement their chosen form of digital solution(s). The majority said that their practice had been supportive or somewhat supportive, but some reported that their practice had been unsupportive. In contrast to some of the other responses to the telephone survey, responses to this question were markedly less categorical suggesting that a barrier to implementing the learning from the ALS sessions and using TECS wasn't GPN confidence or knowledge, or patient resistance but how supportive the practice is of GPN digital champions. The reasons for this in a handful of cases is because of resistance to change but it is mostly due to time or workload pressures.

The majority of GPNs reported that the introduction of TECS had not saved time yet in their practice as discussed in the LCAV findings, many respondents said that there had not been enough time to implement changes and carry out an evaluation of the impact, so this is the most likely explanation for this. Of the 20% that said that TECS had saved time for their practice, the main reasons for this included reduced DNAs, use of video or telephone consultations, and use of GP online services.

Structured telephone survey conclusion

The findings from the telephone survey echo the findings from the LCAV and the digital literacy surveys. The key findings were that as a result of the ALS sessions, GPNs felt confident and knowledgeable enough about TECS to promote them to patients – who were very receptive to the use of digital healthcare solutions – and to colleagues. The main method GPNs used to promote TECS to patients is through face-to-face consultations but Facebook plays an important role in promotion of TECS and the sharing of information digitally. GPNs felt the most important thing they had learned on the course was the breadth of digital health solutions available and the increase in confidence in using and promoting them.

GPNs' perception of their patients' response to the use of TECS was that they had had a positive impact on the clinician-patient relationship and patient experience. They said that they enabled better quality consultations and helped empower the patient to take greater ownership of the management of their health and care. Patient feedback is obviously based on anecdotal evidence reported by GPNs but echoes the findings of the LCAV.

An important challenge for digital nurse champions is the implementation of changes in the practice. Whilst the findings of the telephone survey are very positive about the implementation of TECS, the issue of the practice being supportive (e.g. because of workload pressures, general resistance) of change is a potential area of focus in future work. This draws a parallel with comments in the LCAV findings about the importance of winning hearts and minds, gaining senior buy-in and being prepared and knowledgeable about the benefits of TECS in order to promote them to colleagues.

Overall conclusion

The overarching aim of the programme was to upskill GPNs build knowledge and confidence in order to become digital GPN champions for TECS and lead on the adoption of digital technology in their practice. The findings of the digital literacy surveys, the LCAV questionnaire and telephone survey demonstrate that the ALS approach to upskilling practice nurses is effective and received very positively by course participants. A summary of outcomes identified through the analysis of these surveys are mapped against the programme objectives, listed below.

Programme objective	Outcome
1. increased use of public and closed Facebook functionality to support patients with long term conditions	Virtually all GPNs reported that they had increased the use of social media to support patients and Facebook was the most popular type of social media platform.
2. improved access to service information by patients	Though the data were collected before the impact of social media and updated online material could be fully embedded and measured, GPNs reported positively on being able to use social media to share information about their practice. They were also able to promote important or useful information and had started to notice improved engagement with difficult to engage / reach groups.
3. increase in access to self-care information and then shared management of long term condition	A recurring theme throughout the findings is the potential to improve patient access to information. Not only is it easier to share and for family carers to also access but it is also likely to be more up-to-date and plays a significant role in supporting greater self-care as patients can read information in their own time and carry out further research through digital signposting to other articles, guidance, videos etc. GPNs frequently said this was vital for patients managing long-term conditions.
4. consistent professional approach to TECS by practice nurses and other clinicians across the health economy	A common theme in the responses was the need to professionally engage and understand TECS because they recognised they were becoming an important part of general practice. GPNs gained from the peer support of the ALS sessions. They raise the need to be able to confidently signpost colleagues and patients to trusted resources and/or best practice guidance. The importance of working with the wider practice team and being able to share learning was also recognised as essential.
5. enthusiastic clinical engagement in digital delivery of practice nursing care	Feedback on the experience of the course and the impact it could have on GPN practice were strong throughout the surveys. The baseline score in the digital literacy survey was high, which supports the hypothesis that GPNs are enthusiastic about the potential of TECS and already understand the value; it is knowledge and confidence that need to be developed.
6. embed the use of TECS to become standardised practice for delivery of care for LTCs and adverse lifestyle habits	Most GPNs has begun to embed the use of TECS in their practice. The data were collected before there had been sufficient time for the use of TECS to become standard practice for patients managing multiple long-term conditions, but the findings were positive about the response from clinicians and patients to playing an important role in their care in the future. The use of TECS in health was an expectation of many (younger) patients. The response from older patients was more mixed; some were positive whilst some felt wary or that it was not something they would engage with, instead preferring to continue the traditional relationship with clinicians.
7. creation of GPN digital champions nationally.	The findings of this report – which looked at eight cohorts of GPNs from four regions of England – demonstrate that it is possible to work with GPNs using the ALS approach to upskill them and build confidence to become digital champions. GPNs are well-placed within the general practice team to lead on digital transformation initiatives but support from the practice team/GPs is also critical.

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