NHSE/Regional GPN Transformation (GPFV GPN Ten Point Plan, Action 6): General Practice Digital Nurse Upskilling – Developing confidence, capability and capacity for delivery of technology enabled care Report to NHS England – phase 1 rollout

National context
The pilot programme provided a series of action learning sets (ALSs) to general practice nurses (GPNs) in order to adopt and embed technology enabled care services (TECS) within their general practices and develop as digital GPN champions in their own practices. The initial action learning programme underpinned adoption and dissemination of the use of TECS by GPNs across the Staffordshire Local Health Economy (three sessions over 4 months). Following the success of the Staffordshire ALS, the programme was piloted nationally across the four STP / ICS / GPN Regions, to run 12 action learning sets, split into a two-phase rollout (each ALS comprising two sessions spanning 3 months with remote support).

Each regional GPN board selected one STP / CCG area for the eight cohorts in phase 1. The areas were:
London South-East – 21 GPNS. ALS 1 - November 2018/ ALS 2 – January 2019
Birmingham Solihull – 20 GPNs. ALS 1 - January / ALS 2 – March 2019
Lancashire – 20 GPNs. ALS 1 – November 2018, January / ALS 2 - March 2019
Dorset – 16 GPNs. ALS 1 – January, February / ALS 2 – March, April 2019

The additional four cohorts (phase 2) in 2018/9 were:
Black Country – 9 GPNs. ALS 1 - February / ALS 2 - May 2019
London Euston – 16 GPNs. ALS 1 April / ALS 2 - June 2019
Merseyside – 10 GPNS. ALS 1 April / ALS 2 - June 2019
Sunderland – 10 GPNs. ALS 1 May / ALS 2 – July 2019

The digital upskilling GPN action learning programme
Each individual GPN ALS participant was required to use at least two modes of technology enabled care services in their practice (selected from apps / Facebook / Twitter / WhatsApp / Instagram / Snapchat / video consultation / telehealth or interactive texting).

All participants were asked to complete a digital literacy questionnaire at both sessions – this is a great tool to gauge the progress made between the sessions. It was positive to see that all participants had increased their use of TECS as a direct result of the programme and could see this usage increasing further as the TECS became more embedded in their daily work life. All participants could see the positive benefit of using TECS and felt confident in their ability to share this learning with their wider practice team and also to other clinicians in their area, and all felt positive about the benefits of introducing TECS in healthcare.

Local delivery programme
Each cohort was held locally in the hosting area: London South East - Southwark Clinical Commissioning Group – both cohorts hosted at the CCG; Birmingham and Solihull Clinical Commissioning Group – held across two locations in Birmingham; Blackburn with Darwen Clinical Commissioning Group - session one held at the CCG and session two at the University of Lancashire, Preston campus; and Dorset Clinical Commissioning Group – held across two locations in Dorchester and Poole.

A total of 77 GPNs undertook the GPN ALS programme in phase 1 of the rollout; and 75 participants successfully completed the course. The unfilled places were in the final location (Dorset, which commenced after all other areas) and as a result of the timing could not be offered out further. Therefore, we rolled the three spaces over to phase 2

of the rollout (phase 2 had a further 45 GPNs across four locations). The two GPNs who did not complete the ALS course were both based within Lancashire and had to withdraw part way through due to health / personal issues.

We commenced session 1 across phase 1 between November 2018 and January 2019 commenced with the final follow up sessions being approximately eight weeks later (between January and March 2019). The final evaluations (one to one phone calls undertaken between the programme manager and participant) were completed between April and June 2019.

All of the GPN participants on the course selected trusted apps to support patients with key long-term conditions (LTCs) and create a focus on preventative clinical and self-care interventions. There were considerable barriers reported by the practices regarding the use of Facebook and although the majority of participants originally selected to use this as one of their modes of TECS, a large number had to change their focus following discussion with the wider practice teams. There were a number of concerns around data and privacy which the programme team assisted with, however due to other localised issues within the practices (staffing / practice mergers) creating a Facebook presence was not something the individual practice manager / lead GP in the participating GPN's practice wanted to progress at that time. The GPNs keen to set a page up have access to all the materials via the Clinitecs website for the future. A number of the GPNs focused on animations and health messaging – either creating an animation or sharing those that are already available within their practice (either via the waiting room screen, on their websites or in consultations using their tablet). A number of the GPNs successfully worked with the programme team to produce a script for an animation to share health messages which was then created with Redmoor Health. Two GPNs from separate regions (Birmingham and Lancashire) successfully worked together remotely to co-create an animation which has now been shared nationally. All animations created as part of the programme are detailed in the table below:

Table 1. Animations Produced
The table below lists the animations that have been successfully created by the GPNs as part of the ALS programme national roll out. These are all available for download on the Redmoor vimeo site and can be accessed via the clinitecs website (www.clinitecs.etc). These are available for everyone to access and share on their practice Facebook pages / websites / use in the waiting rooms on the screens as required.

Remember to get your travel vaccines	https://vimeo.com/333953996
Signs and symptoms of urinary infections	https://vimeo.com/332625727
Remember to book your cervical screening	https://vimeo.com/330746005
How to order your prescriptions	https://vimeo.com/338880809
Remember to book your Diabetic annual review	https://vimeo.com/330188057
What is pre-diabetes?	https://vimeo.com/328504172
Remember to book your child vaccinations	https://vimeo.com/327067511
Always attend your asthma review	https://vimeo.com/324948304
Contraception Advice	https://vimeo.com/322495527
NHS Health Checks video	https://vimeo.com/320031896
Managing your diabetes	https://vimeo.com/319537164
Improving health through diet and exercise	https://vimeo.com/318077543
Managing coughs, colds and sneezes	https://vimeo.com/313326545
Cervical screening - some simple answers to your questions	https://vimeo.com/303511596
What extra vaccinations may you need?	https://vimeo.com/347698482
Why is high blood pressure dangerous?	https://vimeo.com/344979747
Remember to book your MMR vaccination	https://vimeo.com/344770010
Signs and causes of leg ulcers	https://vimeo.com/338967091
Remember to book your cancer screenings	https://vimeo.com/348332394

A number of participants expressed interest in using video-consultation for follow on appointments to reduce the proportion of missed face to face consultations (DNAs), and although some had successfully started to trial this, many found that their practice teams did not want to introduce this at the current point, therefore by the end of the course this was still an ongoing discussion within their practice.

As a direct result of the ALS course, all participants were able to successfully signpost patients to modes of accessible and available TECS to increase access to self-care information and encourage shared management of a LTC / adverse lifestyle habits.

Table 2. Digital literacy results at session 1 and session 2 per cohort (phase 1)

Q1. Which of the following statements most closely describes how you feel in relation to using digital technology as part of your practice?

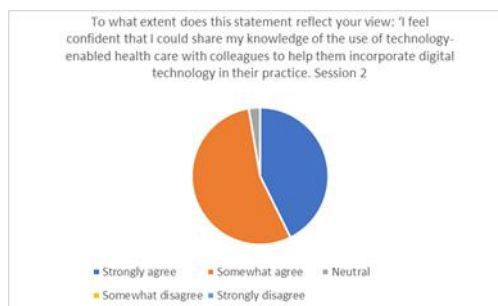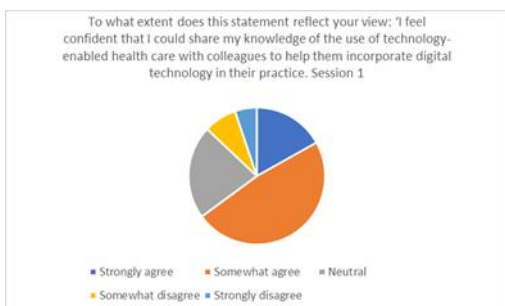|		**ALL**	LONDON	LANCS	DORSET	BIRMINGHAM
Which of the following statements most closely describes how you feel in relation to using digital technology as part of your practice? Session 1	Leading	**15**	11	3	1	
	Ready	**28**		13	7	8
	Worried	**33**	9	4	8	12
	Lost	**1**	1			

		ALL	LONDON	LANCS	DORSET	BIRMINGHAM
Which of the following statements most closely describes how you feel in relation to using digital technology as part of your practice? Session 2	Leading	**25**	3	7	8	7
	Ready	**45**	17	11	5	12
	Worried	**5**	1		3	1
	Lost					

Q2. 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.

		ALL	LONDON	LANCS	DORSET	BIRMINGHAM
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. Session 1	Strongly agree	**13**	3	5	3	2
	Somewhat agree	**37**	13	8	5	11
	Neutral	**17**	5	7	5	
	Somewhat disagree	**6**			2	4
	Strongly disagree	**4**			1	3
		ALL	LONDON	LANCS	DORSET	BIRMINGHAM
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	Strongly agree	**32**	6	6	8	12
	Somewhat agree	**41**	14	12	7	8
	Neutral	**2**	1		1	
	Somewhat disagree					
	Strongly disagree					

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. Session 1

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. Session 2

Q3. 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.

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. Session 1		ALL	LONDON	LANCS	DORSET	BIRMINGHAM
	Strongly agree	50	14	11	12	13
	Somewhat agree	23	7	5	4	7
	Neutral	4		4		
	Somewhat disagree					
	Strongly disagree					

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. Session 2		ALL	LONDON	LANCS	DORSET	BIRMINGHAM
	Strongly agree	66	17	14	16	19
	Somewhat agree	9	4	4		1
	Neutral					
	Somewhat disagree					
	Strongly disagree					

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. Session 1

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. Session 2

Themes shared by GPN participants nationally

All participants undertook an evaluation telephone call from the national programme manager and returned a completed Leading Change Adding Value (LCAV) report (example attached as Appendix 1) at the end of the course. The main themes emerging as outcomes of the course learning are: (1) improved patient engagement/ relationships; (2) improved communications; (3) patient empowerment; (4) improving clinical outcomes. These have been relayed in associated national publications (see Appendix 2).

Patient empowerment

- Patients take responsibility for their LTC / adverse lifestyle habits as TECS provides them with more control. Improved self-awareness and self-management of condition(s) via self-education increases personal knowledge and control of their condition. Trusted apps allow patients to take a more central role in managing their condition, encouraging them to take more ownership and responsibility for their health condition and wellbeing.
- Increased knowledge and control of their LTC(s) / adverse lifestyle habits.

- GPNs noted that patients feel they have improved support and accessibility to information – having a safe place to access the information that they require, when they require it. They can access advice at a time convenient to them – up to them to use as and when. Access to the TECS is easy and often presents information in an interesting and engaging format that is easy for the patient (or their family carer) to absorb.
- Improved engagement and communication between the patient and clinician – communication becomes two way.
- Patients often keen to be educated about their LTC – they respect and trust a referral to suitable TECS.
- The majority of patients are often very receptive of using TECS as they already use such modes in their daily lives.

Improved patient engagement / relationships

- Engagement and communication improved between clinicians and patients. Using TECS to communicate information allowed clinicians to engage with cohorts of patients who were previously hard to reach and previously unable / unwilling to attend face to face appointments.
- There had been a positive improvement in patient relationships – the use of TECS aids consultations as it provided another tool for the patient to use in their self-care. It quickly becomes routine to discuss and use TECS in consultations as is easy to demonstrate and share and easy for the patient to take away and utilise.
- GPNs see the potential for a reduction in missed appointments by patients (some were already able to demonstrate this) as TECS offered alternative solutions to the traditional face to face appointment.
- Patients were often willing to involve their wider support network including family / carers when using TECS which helped to improve their self-care and cascade the message wider.
- Demonstrations of use of TECS in consultations with the GPN or other clinician allowed patients to feel comfortable with various modes of TECS (particularly apps) and sharing animations gave patients something to focus on and learn from whilst the clinician was typing up their notes in the patient's medical records. Animations, sharing campaigns on practice public Facebook pages and introducing texting to patients have been successful by improving engagement with previously unreceptive cohorts of patients and/or their carers– often encouraging those who are usual DNAs to attend for appointments.

Improved communications

- Using TECS to share and cascade information was reported as being more efficient than traditional mail drop / sharing information via leaflets in practice, as the promotion of best practice can reach a wider audience more quickly. In general, clinicians felt that the use of TECS for sharing health messages was less intrusive and more engaging and allowed them to target specific cohorts of patients when required. Public practice Facebook pages and texts allowed them to reach the wider population including hard to engage cohorts of patients and/or carers.
- TECS is accessible for all and allows for effective and efficient information sharing in an interesting way – it is engaging for all, allows for two-way interactions in consultations, opens conversations and allows signposting to safe, up to date and reliable health information. All GPN participants noted that there was a need to 'move with the times' – TECS is part of most people's daily life and the majority were happy to embrace that in their healthcare.

Improving clinical outcomes

- Safety - having TECS protocols in place makes both the patient and the clinical team feel more comfortable.
- Clinicians were often nervous when commencing implementation of TECS but surprisingly at ease once started.
- Wider practice team support is a necessity to keep the momentum going and to ensure succession planning for the future of primary care delivery.

- Missed appointments reduced - patients happy to communicate via TECS where appropriate and avoid unnecessary healthcare usage. Clinician and patient texting particularly useful to help reduce missed appointments.
- Improved health messaging via Facebook – closed groups and public practice pages.

All participants were asked to identify what they felt were the main benefits to clinicians and patients in introducing digital healthcare. The responses fell into five main areas (1) improved communication and engagement with patients – often patients are confident to share the information with family and friends; (2) increased education and knowledge for patients (and clinicians) which enables patients to look after themselves / control their condition better. One GPN advised that TECS had opened a new world in their small consultation room and allowed them to reinforce the messages given in the consultation; (3) patient empowerment by giving the ownership / responsibility back to the patients, resulting in improved compliance; (4) increased accessibility resulting in improved relationships; and (5) safety -signposting the patients to accurate and secure trusted information, ensuring the patient can access this and is not obtaining incorrect information from unreliable sources.

As part of the final evaluation call, participants were asked if adopting TECS had saved time for their GP practice. It was noted that the majority of GPN participants advised that it had not seemed to save significant time as yet as adoption of TECS at scale was still in its implementation phase, however all thought that TECS would save time in the future as this became more embedded in their practice for team members. It was noted that the information sharing / population health messages on social media helped to reduce calls to the wider practice team as information could be cascaded widely and quickly when required and that allowing patients access to trusted and safe information to manage their condition was anticipated to reduce time spent in future consultations and help the patient to look after themselves better between consultations. Using video-consultation was seen as one of the easiest ways to reduce time for both the clinician and the patient and it was observed that this could also help to reduce the number of DNAs.

GPN participants were asked what was the most important thing they had learnt from the ALS course, with the majority answering that awareness of what TECS is available for use in healthcare, and how to use this to help patients to better self-care and manage their LTC(s) / adverse lifestyle habit(s) more efficiently, was a key factor in changing their perception of the adoption of TECS. A few GPN respondents were happy to advise that prior to the course they had no interest or confidence in the adoption of TECS and now used it regularly with their patients and that gaining the confidence from the ALS sessions had been a revelation and changed their perceptions that catalysed their embracing of TECS. All GPN participants highlighted the ease of implementing TECS in primary healthcare by using easily accessible TECS that is already available, but just in a different way.

All of the successful GPN participants were asked as the final question of the evaluation call 'knowing what you do now would you do it all again' and all answered with a resounding **YES!!**, with the majority saying that they would happily recommend any of their colleagues to undertake the ALS course if it was available in the future as they had gained such a lot of knowledge and confidence following their participation.

Following the completion of the course all GPN participants were confident that they could provide a consistent professional approach to TECS by general practice (and other) nurses and clinicians across their local health economy.

Video case studies
Following the course, we have recorded a number of case study videos with GPN phase 1 participants. These highlight their successes as part of the course, and promote the use of TECS to other clinicians.
Fiona Gill   https://vimeo.com/344987812
Linda Drake   https://vimeo.com/341566105

Jenny Mather   https://vimeo.com/297147812
Stephanie Zakrewski   https://vimeo.com/352499180

National Digital Conference, 'Digitally Transforming Primary Care – Making it Happen at Scale', 19th June 2019 held at Facebook Headquarters, London

We held our national conference 'Digitally Transforming Primary Care – Making it Happen at Scale, on Wednesday 19th June 2019 at Facebook Headquarters, London. The conference aimed to raise the profile of how to digitally transform primary care and to showcase the success of some of our digital general practice nurse champions who are central to the GP Forward View. Case studies demonstrated how upskilling nurses can speed the digital transformation of technology enabled care services.

Digital general practice nurse champions from the action learning sets showcased how embracing technology helped to promote self-care, encourage shared management of long-term conditions, and underpin prevention leading to more effective and productive working. Six digital GPN champions presented and a further two provided pre-recorded case studies to highlight their achievements.

The conference was co-chaired by Dr Ruth Chambers OBE, Staffordshire STP's clinical lead for technology enabled care services, digital workstream and Andy Hadley, Staffordshire CCGs, and we had speakers attending from NHS England, Health Education England, the RCN, Facebook, Redmoor Health Social Enterprise, 'Pumpin' Marvellous (heart charity), secondary care consultants, and clinical commissioning groups (CCGs).

Conclusions

The successful completion of GPN participants in the ALS encouraged the adoption and embedding of TECS in general practice nursing and to deliver substantive cost, clinical and quality benefits. The ALS successfully demonstrated how the application of TECS could promote health and wellbeing and prevent avoidable illness and support patients to adopt and access preventative interventions.

Acknowledgements

As part of their delivery of the GPN 10 Point Plan, Action 6, NHSE funded a successful digital GPN digital upskilling action learning pilot in Staffordshire between March and September 2018. Following the success of the Staffordshire ALS, the programme was piloted nationally across the four STP / ICS / GPN regions, to run 12 action learning sets in two phases. The funding from the NHSE Nurse Transformation Fund (GPN10 Point Plan, Action 6, associated with the GP Forward View) was hosted by Staffordshire STP's digital workstream.

The programme was clinically led by Dr Ruth Chambers OBE and delivered by Rachel Hatfield (national programme manager), Ann Hughes (digital nurse expert), Marc Schmid (digital technology expert, Redmoor Health Social Enterprise), Anna Buckley (digital technology expert, Redmoor Health Social Enterprise), and was supported by Kellie Johnson (Clinical Quality Improvement Manager, Nursing and Quality Team, Staffordshire CCGs).

Report author: Rachel Hatfield (national programme manager, action learning sets – creating digital champions)
Report co-author: Ruth Chambers (clinical lead for the technology enabled care services programme of Staffordshire STP's digital workstream)

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Anonymised example

Short Case Study Title	Please complete all questions in this table
Please provide a brief overview of your general practice (including your role in practice – give name; and any other relevant roles e.g. with CCG).	I am a Senior Practice Nurse, working in a practice with approx. 6400 patients over the 2 sites. I specialise in Chronic Disease Management and also do general practice nurse duties
Where to look (unwarranted variation) How did you identify a need for change in where or what or why you focused technology enabled care services (TECS)? What prompted this focus?	It appeared that younger patients were less likely to attend for reviews. In preparation for the CQC inspection the Practice Manager picked up that in-patient feedback 39% of those with a chronic disease felt unsupported. Some pts had asked me about apps for their conditions & I lacked confidence to show them. I would verbally direct them to web sites.
What to change What were things like before the change? What did you identify that needed to change? What did the research literature / clinical evidence tell you about what you should try to achieve with TECS and selected health condition(s) or adverse lifestyle habits?	Younger patients with diabetes or asthma were consistently poor attenders. Leading to time wastage. Inhaler technique was often poor when assessed. Self-management plans & assessment tools were not brought to appointments. Attendance at study days for Diabetes & in nursing journals, it has been mentioned many times about how technology can help people monitor their own health & wellbeing &improve outcomes. On a personal level I felt that I should be able to use more technology but lacked confidence.
How to change How did you and other staff in your practice lead the adoption of TECS and change(s) that was made? What did you do differently? What action was taken?	Admin staff had recently training on the use of Iplato so with them we set up text message reminders for appointments, we identified those pts who needed a review & messages were sent to them. During appointments we showed patients appropriate apps, the Manage your own health app is very popular. We can let the pt explore the app while writing up notes. Some pts seen the posters in reception & downloaded an app while waiting & then asked questions about what they have seen.
Your results How did you measure success? What metrics were used to demonstrate success? Describe the success of the change you made/are making, based on the triple aim outcomes of LCAV: • Better outcomes	We will be looking for improvements in Hba1c, pefr, inhaler technique. DNA rates have improved. Verbal feedback from patients has been positive, some stating that their appointments were more fun, also that they learnt more & felt their care was more like a partnership.

Rachel.Hatfield1@nhs.net   03/09/2019

Short Case Study Title	Please complete all questions in this table
• Better experiences (patients and staff) • Better use of resources	We are using less paper as we don't print information to take away, also many appointments are now taking less time as the pt comes having looked at the apps & is more informed.
What has the impact been for patients? Have you had any patient / family feedback since you introduced TECS for delivery of care?	See above, also see comments on the Action plan about the boy with Asthma & ADHD
Sharing the learning What did you learn from your experience of adopting TECS as part of your action learning? What were some of the challenges in the change or adoption of TECS? What advice would you give others?	I have learned that technology is there to help us and our patients. At the beginning of the process I even struggled to switch on the Tablet!! I really lacked confidence with any technology & it didn't really interest me. Now I enjoy using it both at work & at home. I'm now using Outlook to prompt me to me when Patient Specific Directives are due to be updated & have links to Public Health England so that I can download them quickly onto the shared S drive so that the nurses can access them from both sites. This has greatly reduced my admin time. My advice to others is give it a go, it can make your workload easier & more interesting. If I can do it anyone can.
What is happening now? What is the current situation in your practice following your attempts to adopt TECS around minimising unwarranted variation e.g. improving clinical management or patient empowerment of their health condition(s) or lifestyle habits?	The nurses are using the tablets more &more. We started mainly using Manage your own health but are now using more lifestyle apps. The doctors are not so keen on using technology – we are using every opportunity to show them the benefits both for the surgery & the patients.
Anything else you want to add describing your learning from this action learning to become a digitally enabled practice nurse?	When I put my name forward, I hoped that I wouldn't get a place, but I am so glad that I did!! At the recent Nurses forum, I was one of the digital nurses showing others what we were doing.

Appendix 2: National publications connected with learning from GPN digital upskilling action learning programme

Chambers R, Hughes A, Beaney P, Schmid M. You too can be a digital practice nurse champion. Practice Nurse 2018; 48 (6); 11-15. ISSN 0953 -6612 www.practicenurse.co.uk

Chambers R, Cox T, Hughes A, Schmid M. Technology enabled care services for patients with long-term conditions. *Journal General Practice Nursing* 2018; 4 (3): 60-64.

Chambers R, McKinney R, Schmid M, Beaney P. Digital by choice – becoming a part of a digitally ready general practice team. Primary Health Care 2018;28 (7): 22-7. https://journals.rcni.com/primary-health-care/evidence-and-practice/digital-by-choice-becoming-part-of-a-digitally-ready-general-practice-team-phc.2018.e1502/full

Johnson K, Johnstone H, McGougan T (2018) The role of technology-enabled care in high-quality patient care. Practice Nursing vol 29 No 8 https://www.magonlinelibrary.com/doi/abs/10.12968/pnur.2018.29.8.397

Beaney P, Hatfield R, Hughes A, Schmid M, Chambers R. Creating digitally ready nurses in general practice. Nursing Management June 2019. https://journals.rcni.com/nursing-management/evidence-and-practice/creating-digitally-ready-nurses-in-general-practice-nm.2019.e1840/full

Chambers R, Talbot M, Hatfield R. Enabling clinicians to adopt technology enabled care for patients with respiratory conditions. Primary Health Care Journal RCNi June '19. https://journals.rcni.com/primary-health-care/evidence-and-practice/adoption-of-technologyenabled-care-for-patients-with-respiratory-conditions-in-primary-care-phc.2019.e1551/full