

Digital by choice: becoming part of a digitally ready general practice team

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Abstract

Practice nurses from a sustainability and transformation partnership area participated in six action learning sets focused on digital upskilling. The evolving digital practice nurse champions shared their learning and experiences of technology-enabled care in their practices. As well as identifying barriers to deployment, they overcame these challenges and accelerated the transformation of the delivery of care in their practices to create a digitally ready workforce.

The action learning sets consisted of three sessions spanning approximately four months in the same location. All were led and supported by an experienced clinical telehealth practice nurse facilitator and an expert on applications of technology-enabled care, during and between the sessions, with one-to-one remote and in-practice support depending on the needs of participants and their practices, and preferences for technology-enabled care services.

This is the story of Rudy, one of the 38 nurses who participated in the six cohorts. Her path spans sharing her aims, the performance indicators of her practice pertaining to providing care for long-term conditions and adverse lifestyle habits, her digital literacy before action learning and after the third session, her completed action plan and her achievements.

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Keywords

action learning, e-learning, information technology, interprofessional learning, learning outcomes, practice learning, practice nursing, reflection, social media, technology, telehealth

Introduction

Digital nurse champions from a sustainability and transformation partnership (STP) area are showcasing what is possible by creating six action learning sets for evolving digital practice nurse champions who can cascade their learning and experiences of technology-enabled care in their practices.

As well as identifying barriers that exist to deployment they promote ways to overcome such challenges and accelerate the digital transformation of the delivery of care in general practice. This learning can be shared with clinicians in primary care and other front-line settings to create a digitally ready workforce.

This is the story of Rudy, who was one of the 38 nurses who participated in six cohorts across Staffordshire. All practice nurses in the six Staffordshire clinical commissioning groups could apply to join an action learning set, which consisted of three sessions spanning about four months in the same location. All

the sessions were led and supported by an experienced clinical telehealth practice nurse facilitator and an expert on the applications of technology-enabled care, during and between the sessions. They provided one-to-one remote and in-practice support, depending on the needs and preferences of participants and their practices for technology-enabled care services (TECS). A bursary paid for attendance at the three sessions, as well as reading and planning time to underpin application of learning in the participants' practices.

The aims of action learning relating to technology-enabled care services

The aims of the action learning were to help practice nurses embed a range of TECS as part of usual service provision focused on health conditions and patients' adverse lifestyle habits. It was anticipated that this would enhance patient engagement, increasing the likelihood of patients adhering to treatment and changing their behaviour to address



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adverse lifestyle habits, while also providing a viable path to more effective and productive working by practice nurses, which is the future for provision of care by the NHS (NHS England 2016a, 2017).

Box 1 shows Rudy's personal aims. She defined these after the first session of her action learning set, which she attended with two other nurses from her practice.

Box 1. Rudy's aims over the period of action learning

- » Improve digital literacy by becoming familiar with the Florence Simple Telehealth texting system, apps and Facebook
- » Expand the use of these in practice to improve my effectiveness and productivity
- » Empower my patients to take control of their conditions and improve their understanding, which in turn should improve their clinical outcomes
- » Work alongside our practice nursing team to incorporate digital technology into our practice

Table 1. Technology-enabled care services available

Technology-enabled care services logo	Technology-enabled care services name	Technology-enabled care services application
	Florence Simple Telehealth	Automated texting programme
	Manage Your Health app	Clinically designed app with a focus on long-term conditions
	Facebook	Internet social media site and app
	Skype	Secure text, audio and videoconferencing app available for phones and computers
	WhatsApp	Secure text, video and audio messaging app
	AliveCor	A simple one lead cardiogram used to indicate atrial fibrillation
	The internet	Websites providing lifestyle interventions, such as www.nhs.uk or those of national organisations supporting long-term conditions
	Patient Online	Enables patients to make appointments at their GP practice, order prescriptions, or access their medical records
	Text messaging	Text, video and audio messaging system available on all phones and some computers

Focusing technology-enabled care services on population needs and preferences

It is important to be able to justify any investment by the NHS in transformational change – in this case, to repay the costs and efforts required for digital upskilling, including the equipment needed to provide certain types of digital care. This equipment might include: a tablet with Wi-Fi to undertake video consultations on a home visit or show a recommended app to patients during consultations, or devices to lend to patients so they can record biometric measurements such as their blood pressure, weight or oxygen saturation blood levels.

Practice nurses can find it difficult to be released from work or to prioritise time at work to design and set up a new service with associated protocols and changes in usual practice. Thus, the nurses in these initial action learning sets required bursaries to cover their non-working hours to attend the learning sessions, read about and watch videos of good practice, read and adopt governance and delivery protocols, as well as make changes to systems in their practices. The bursaries also covered any necessary equipment. However, the bursaries were not received until each nurse had reached agreed achievements and answered final evaluation questions.

Also essential to the preparation for action learning was a practice performance plan for each nurse, relating to the latest quality and outcomes framework (QOF) indicators for providing care for selected long-term conditions and lifestyle habits, with suggested opportunities for several types of TECS. Table 1 shows the different TECS available, while Table 2 shows Rudy's practice's performance chart and which TECS could be used for each lifestyle.

Digital literacy

Another element of learning to become digitally ready is for the nurse to analyse where they are now in terms of digital literacy in relation to TECS, so their action plan can be examined (Health Education England (HEE) and RCN 2017). Table 3 shows Rudy's assessment of her digital literacy at her first session and then four months later after her third session.

Technology-enabled care services applications and achievements

Table 4 shows the action plan Rudy compiled after her first session and her update of it four months later.

It can be seen that her focus was on patients with hypertension and/or diabetes, and she describes using Florence Simple Telehealth and apps for a range of applications, such as enhancing medication adherence and blood pressure monitoring. She also describes the increased productivity that TECS gave her and other nurses in her practice team.

The Leading Change, Adding Value template (NHS England 2016b) proved a great way to capture Rudy's achievements a couple of months after she completed the action learning set. The template underpins the national framework for all nursing, midwifery and care staff, which can be used to achieve the 'triple aim' measures of better outcomes, better experiences for patients and staff, and better use of resources.


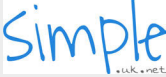



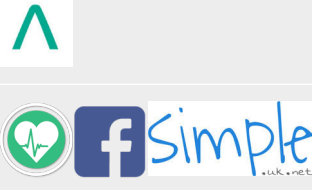

Completing the template helped Rudy review her starting point and how she had put her learning into practice as a practice nurse and with nurse colleagues and the whole practice team:

- » She described how she could see gaps in practice where digital technology could be used.
- » She relayed how the practice team realised that times were changing and they needed to keep up with the times.
- » She thought through the various digital technology options to support their current practice, focus on patient-centred care and encourage patients to take responsibility for their own health.
- » She felt this would also make the nursing team more efficient.

Key points

- Practice nurses need protected time to plan and implement changes to modes of care delivery
- Making change happen at practice level requires the whole team to agree and support each other
- Once there is clinician confidence in digital delivery there are opportunities to provide digital modes of care delivery

Table 2. Rudy's practice performance data and technology-enabled care services opportunities

Lifestyle	Long-term condition indicator	Practice	CCG	National	Technology-enabled care services opportunities
Smoking	Record of offer of support and treatment for smoking (QOF 16/17) (including exceptions) Indicator: SMOK004	89.5%	84.5%	88.8%	
Hypertension	Prevalence (QOF 16/17)	15.8%	17.1%	13.8%	
	Blood pressure target <150/90 (QOF 16/17) (including exceptions) Indicator: HYP006	85.9%	80.8%	80.0%	
Asthma	Review in the past 12 months (QOF 16/17) (including exceptions) Indicator: ASTH003	80.4%	77.4%	76.4%	
Chronic obstructive pulmonary disease (COPD)	Record of FEV1 in past 12 months (QOF 16/17) (including exceptions) Indicator: COPD004	87.1%	87.9%	86.8%	
Atrial fibrillation (AF)	Prevalence (QOF 16/17)	2.3%	2.4%	1.8%	
	Expected prevalence (QOF 15/16)	2.7%	2.9%	2.4%	
	Patients with AF treated with an anticoagulant (QOF 16/17) (including exceptions) Indicator: AF007	85.4%	80.7%	81.2%	
Type 2 diabetes	All three National Institute for Health and Care Excellence treatment targets: » Blood glucose (≤58mmol/mol) » Cholesterol (≤5mmol/l) » Blood pressure (≤140/80 mmHg)	52.6%	44.8%	41.1%	

Source: Rudy's GP practice, Audley Health Centre, Northern Staffordshire

Before she started the action learning, Rudy's practice used very little digital technology. The team saw that their practice could be streamlined and made more efficient by using digital technology. Patients had already indicated they would welcome advice on using health-related apps. The nurses' knowledge of these was poor, however. The nurses were aware that the use of TECS could improve patients' compliance and health outcomes, reverse their adverse lifestyle habits, and help them take control of their own health journeys.

Rudy and three other members of the nursing team led the adoption of TECS in their practice. Each chose to lead in their main

specialties – for one nurse it was respiratory and for another it was atrial fibrillation (AF). Rudy's was hypertension and diabetes, while the practice matron supported management of housebound patients. They held a meeting with the GPs in the practice to educate them about TECS and how it could support their practice. The GPs took to it well, which resulted in TECS being used across the practice.

A significant achievement for Rudy was that TECS changed the practice's management of patients with poorly controlled and newly diagnosed hypertension. Previously, the practice used many appointments with nurses for checks and management of blood pressure.

Table 3. Rudy's assessment of her digital literacy at the end of her first and third action learning sessions

Question	First session	Third session
1. How often do you use digital technology, such as apps and telehealth, in your practice at work?	Never	75% of the time
2. Which of the following statements most closely describes how you feel in relation to using digital technology as part of your practice? » 'Digitally Lost' – I feel a bit lost in this new digital age, the old ways seem better and I wonder why we are changing them » 'Digitally Worried' – I'm 'dipping my toes in' the digital world but it makes me feel worried. I can see the benefits of the new ways but they often make me nervous » 'Digitally Ready' – I feel comfortable with the digital world and have the skills to adapt to the changes » 'Digitally Leading' – I love adapting to and with the digital changes. I see the opportunities on offer and I am an advocate for the adoption of digital healthcare	'Digitally ready' – I feel comfortable with the digital world and have the skills to adapt to the changes	'Digitally ready' – I feel comfortable with the digital world and have the skills to adapt to the changes
3. Which of the following statements do you agree with? » 'Digital technology, data and information will make a...' » Large positive contribution to the (self-)management of patients with LTCs in the community » Small positive contribution to the (self-)management of patients with LTCs in the community » No difference to the (self-)management of patients with LTCs in the community » Small negative contribution to the (self-)management of patients with LTCs in the community » Large negative contribution to the (self-)management of patients with LTCs in the community	Make a large positive contribution to the (self-)management of patients with long-term conditions in the community	Make a large positive contribution to the (self-)management of patients with long-term conditions in the community
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'	Strongly agree	Strongly agree
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'	Somewhat agree	Strongly agree
6. Please list forms of digital technology you have used before (in your everyday life or at work), such as Skype, apps, social media and telehealth	None before this training	None before this training
7. Please list which of these forms of digital technology you would feel confident to use as part of your current practice?	Facebook	Manage Your Health app, video consultation, Florence Simple Telehealth, Facebook
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 healthcare with colleagues to help them incorporate digital technology in their practice'	Strongly agree	Strongly agree
9. To what extent do you agree with the following statement: 'I can see the benefit of using technology-enabled healthcare for my patients and fellow practice nurses/GPs'	Strongly agree	Strongly agree

Any home monitoring was conducted using a sheet of paper that the patient had to return to the surgery. Compliance with home monitoring was poor for some patients, who would forget to bring back the sheet with the readings.

Doing much of the hypertension monitoring using Florence Simple Telehealth has:

- » Improved compliance by sending twice-daily reminders.
- » Saved on appointments, as follow-up of patients can be done by phone.
- » Reduced time wasted on appointments when patients returned without their home readings.
- » Reduced time wasted chasing patients to return their sheets.

Rudy also chose to use the Manage Your Health app. She strongly recommended it to patients newly diagnosed with diabetes and achieved a good response. She now routinely shows it to patients previously diagnosed with diabetes during their annual reviews. She uses Florence Simple Telehealth to regularly remind patients to administer medication such as inhalers or depot/B12 injections. She and other nurses also now use AliveCor to diagnose AF.

Rudy was asked to describe the success of the changes already made or still being made in relation to the triple aim measures. She and the other nurses measured success primarily based on feedback from patients and staff.

Patients' feedback was positive. They reported that they found the app to be a useful resource that helped them to increase their knowledge and understanding of their condition at their own pace. They also responded very well to Florence Simple Telehealth – they liked the reminders as a way to keep control of their health. Most patients said they preferred to submit blood pressure readings using Florence Simple Telehealth rather than paper charts, as they often forgot to respond with the paper method and found it inconvenient to keep coming to the surgery, especially if they did not have their own transport.

Staff feedback was also positive. The nursing team and GPs felt TECS improved the patients' experiences and long-term health outcomes, as it assisted them to take responsibility for managing their own health. Staff liked using the app to reiterate their advice, so patients could later consolidate the information given at their consultation in their own time at home. They also felt that it reduced the number of appointments needed and enabled more streamlined and efficient management.

The main challenge in using TECS that Rudy described was resistance from some patients – some felt they did not need the app as they already understood their condition well, while others did not use technology much and preferred to continue with their previous

Table 4. Rudy's initial action plan and the plan updated after the fourth month

Nurse completed after first action learning session				Nurse updated month after third session
Condition	Aim	Resource	Expected outcomes	Update/outcomes
Hypertension	<ul style="list-style-type: none"> » Empower patients to take control of their condition and gain the confidence to manage it » Improve patients' compliance with submitting readings » Increase productivity of the nursing team 	Florence Simple Telehealth	<ul style="list-style-type: none"> » Improve patients' compliance with submitting readings » Increased patient satisfaction » Can be audited using questionnaire after the six-month period 	Florence Simple Telehealth has worked well for our hypertension patients. It has improved their compliance with home monitoring. They have been very satisfied with the service; they have found it easier rather than having to return to an appointment or to drop off written readings; they have also found the text reminders helpful. It has empowered the patients to take control, and the advice messages add to this. It has also increased our productivity by saving valuable appointments, as results can be viewed online and patients liaised with via a telephone consultation
Diabetes	<ul style="list-style-type: none"> » Empower patients to take control of their condition and gain the confidence to manage it » Improve compliance with medication, in turn improving patients' condition 	<ul style="list-style-type: none"> » Manage Your Health app » Florence Simple Telehealth for medication reminders 	<ul style="list-style-type: none"> » Provide more resources to help patients understand and manage their condition » Increased patient compliance » Can be audited after six months 	Our younger and newly diagnosed population of diabetic patients have enjoyed the Manage Your Health app and given positive feedback. It has allowed them to gain knowledge at their own pace and acts as a good reference guide. Some of our long-standing diabetic patients have been keen, although a lot have not shown interest as they feel they know a lot about their condition already. I feel there has been a valuable place for it, especially with our newly diagnosed group. I have used Florence Simple Telehealth for medication reminders with a poorly compliant asthmatic teenager who forgets to take an afternoon dose. It has worked well; feedback has been good. In general, Florence Simple Telehealth has improved compliance and enabled patients to take control of their own management of their conditions

methods. However, Rudy recognised that TECS do not have to be for everyone: 'If we can use TECS to support our willing patients then that is a huge step in the right direction.'

'There is a big place for technology-enabled care services in consultations'

When we came to evaluate Rudy's experience of the project overall, she expressed several ways in which she had progressed during and after the action learning. The most important learning she recognised was that despite her initial scepticism she realised there is a big place for TECS in consultations.

She was surprised that TECS could be so useful and that her patients would be so receptive. She also felt it had improved her patients' ability to manage their long-term conditions, especially those who were newly diagnosed and found the apps she recommended to be trustworthy sources of information post-consultation, when it is easy to forget details and lose paper leaflets.

Overall, Rudy rated her action learning set training as improving her confidence to use TECS in caring for her patients '100 times' more than she had before she started the course. The practical support and information provided by the programme has given her the knowledge and confidence in TECS to use it with her patients and has empowered her practice as a clinician by expanding her 'toolkit'.

The advice Rudy would give to others is: 'Try TECS to see what it can do for you. As

our confidence as nurses in TECS is relayed to patients, they develop confidence too. My final piece of advice is to ask for support if you are unsure – TECS in practice is new to many of us and we all have varying knowledge, but we are here to support each other moving forward. Currently, we are all working together as a team with the nurses and GPs in our practice, all using TECS and promoting them equally. While we have varying levels of knowledge and confidence, we are working together and supporting each other moving forward and all feel confident about a future using TECS.'

Conclusion

Rudy had been sceptical but was prepared to try TECS in her practice and has become a clinical champion with a supportive and interested team. She has recognised the advantages of patients being empowered to take more responsibility for their own health conditions using TECS, and the general practice team has become more effective and productive in their provision of care. Rudy has become increasingly confident in providing care digitally from an action learning approach with other nurses inside and outside her practice team. She obviously now enthuses her patients, too – they embrace TECS organised for a specific purpose relevant to improving their health and well-being (Chambers et al 2018).

The NHS needs a digitally ready workforce (Health Education England 2017), with every nurse an e-nurse (RCN 2018).

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