

Date 14/04/2025
Your Ref
Our Ref 9878

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Dear

FREEDOM OF INFORMATION – TELEPHONE SYSTEMS

I write in response to your request for information in relation to GP practices and telephone systems.

Question:

1. Does NHS Lothian require all GP practices operating in NHS premises to use health board telephony systems?

Answer:

No.

Question:

2. Are GP practices permitted to procure other technologies as an alternative to health board telephony systems?

Answer:

As independent contractors it is up to GP practices to procure their telephony systems.

Question:

3. With regard to the national BT switch from analogue to digital landlines, what efforts has the board made to ensure GP practices are aware that they do not require to install a new network and can use existing infrastructure to run cloud hosted telephony over?

Answer:

The attached Scottish Government document General Practice Telephony: Advanced (Cloud) Telephony Guidance was circulated to GP practices in September 2024.

Question:

4. If GPs are not allowed to use the existing network to run voice over, can the health board provide a reason this cannot be done via VLANs or segregation on the network?

Answer:

A VLAN is not a security boundary and is easily bypassed, for us to meet our cybersecurity requirements we cannot host 3rd party systems on our network directly in such a way. This also provides another point of ingress into NHSL networks by hackers etc.

Question:

5. What guidance has been provided to GP practices to support them to facilitate the switch in the most cost-effective and efficient manner?

Answer:

As Q3 above.

Question:

6. Does NHS Lothian permit the recording of telephone calls between GP and patient?

Answer:

This is not something we would prohibit or promote; GPs are independent contractors and can make this decision without our input.

Question:

7. If no, what assessment has been carried out of the potential benefits and risks of recording telephone conversations between GPs and patients?

Answer:

A risk assessment is 2 part, an NHS Lothian System Security Policy (SSP) and Data Protection Impact Assessment (DPIA) – this should be carried out for all new phone systems.

Question:

8. What consideration has the board given to breaking down NHS buildings and services invoices to show telephony costs, providing greater transparency for GP practices regarding their expenses?

Answer:

Telephony systems are not covered/recharged/provided under the SLA that Estates and Facilities have with GP practices

I hope the information provided helps with your request.

If you are unhappy with our response to your request, you do have the right to request us to review it. Your request should be made within 40 working days of receipt of this letter, and we will reply within 20 working days of receipt. If our decision is unchanged following a review and you remain dissatisfied with this, you then have the right to make a formal complaint to the Scottish Information



Commissioner within 6 months of receipt of our review response. You can do this by using the Scottish Information Commissioner's Office online appeals service at www.itspublicknowledge.info/Appeal. If you remain dissatisfied with the Commissioner's response you then have the option to appeal to the Court of Session on a point of law.

If you require a review of our decision to be carried out, please write to the FOI Reviewer at the email address at the head of this letter. The review will be undertaken by a Reviewer who was not involved in the original decision-making process.

FOI responses (subject to redaction of personal information) may appear on NHS Lothian's Freedom of Information website at: <https://org.nhslothian.scot/FOI/Pages/default.aspx>

Yours sincerely

ALISON MACDONALD
Executive Director, Nursing
Cc: Chief Executive
Enc.



Scottish Government
Riaghaltas na h-Alba
gov.scot

Primary Care Directorate
Digital Health and Care Directorate

General Practice Telephony: Advanced (Cloud) Telephony Guidance

Scottish Government

General Practice Telephony: Advanced (Cloud) Telephony Guidance

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Scottish Government

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This information can be made available in alternative formats, such as easy read or large print, and may be available in alternative languages, upon request.

Please contact **Kachi Okorie** on kachi.okorie@gov.scot

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About this guidance

Introduction and Purpose

This guidance is intended to assist general practices when procuring new, more advanced telephony solutions, and for Health Boards and Health & Social Care Partnerships (HSCPs) or others supporting the practices in this process.

This guidance includes a template specification ([see Table 1 Page 15](#)) of key features available in new solutions that will benefit practices, staff and patients. This specification can be reviewed and updated to meet local requirements. Use this as a check list when looking at a new solution.

This guidance is also part of a series of planned communications by the Telephony industry aimed at raising awareness of the BT Openreach switch off of analogue telephone services on 31st January 2027. There is further information online and communications issued by Openreach on an ongoing basis. ([see the footer for useful links and the top of page 10](#))

The Scottish Government are working to ensure Primary Care contractor groups are prepared for this and are planning for the necessary business provisions.

A pro-active approach is advisable so contact your current telephony provider/s to request information about how this change will affect your practice.

Background

In 2021, the Scottish Government and Convention of Scottish Local Authorities (COSLA) published a refreshed [Digital Health and Care strategy](#) which sets out the intentions to work together to improve the care and wellbeing of people in Scotland by making best use of digital technologies in the design and delivery of services.

The above, alongside the recently published [General Practice Access Principles](#) sets expectations for practices to:

1. Enhance and modernise existing digital technologies to support the functioning of integrated health and care systems and services.
2. Enable access to General Practice for people in an easy, clear, and equitable way in keeping with need based on the principles of [Realistic Medicine](#).

Telephony is an essential and critical component of a general practice's ability to deliver its contracted service to patients. It is a public facing function affecting patient experience and practice efficiency and has a key role in business continuity, practice resilience and patient safety. The localised nature of General Practice telephony has

in many cases meant that practice telephony systems have not kept pace with the practice clinical systems in terms of digital systems innovation.

Legacy systems may not offer the capacity or flexibility to service high and peak patient demands. Prior to the Covid-19 pandemic this was recognised as a challenge for practices. The demands arising from and the response to the Covid-19 pandemic across general practice (including significant increase in home working and telephone consultations) further highlighted the limitations in many legacy practice telephone systems.

Telephony systems supporting general practices which are Internet Protocol (IP) technology based, cloud hosted and integrate with the general practice clinical systems are now available. Such systems can help practices manage high and peak demands, support resilience and flexible working (including home and mobile working) and improve patient experiences. Annex B lists some of the benefits (strategic and tactical) which practices may expect from moving to an advanced telephony solution.

BT OpenReach and all Communication Service Providers (CSPs) stopped selling and provisioning old analogue (PSTN & ISDN)¹ services in September 2023 and will cease support by the end of January 2027². Practices, and their supporting Health Boards / HSCPs should consider these factors when determining commissioning of future practice telephony systems.

Although the migration to digital alternatives is an industry led initiative, the Scottish Government are working together with the telecoms industry to ensure Primary Care contractor groups are aware, protected, and prepared.

Health Boards and HSCPs should encourage practices to benefit from advanced telephony systems which can improve practice efficiency and resilience and provide a better experience for their patients. Although not responsible for providing or funding General Practice telephony services, except for managed building and services, Health Boards and HSCPs should support practices with technical issues which relate to the practice digital infrastructure in particular networking and Scottish Wide Area Network (SWAN)³ connections.

Joint or community wide procurements may be appropriate as well as offering the potential to secure best value for money and widening the marketplace scope.

In providing procurement and technical support, Health Boards and HSCPs should ensure where possible the services reduce likelihood of unlawful discrimination and promote Equality of Opportunity by supporting NHS compliance with the nine characteristics in its public sector equality duty as defined by the Equality Act 2010. As a patient facing/interacting service this is applicable to telephony services.

¹ [PSTN: Public Switched Telephone Network + ISDN: Integrated Services Digital Network.](#)

² [Preparing for the BT PSTN Switch-Off in 2027 | Modern Networks \(modern-networks.co.uk\)](#)

³ [About | Scottish Wide Area Network \(scottishwan.com\)](#)

Further useful information is available in via the following links:

[UK transition from analogue to digital landlines - GOV.UK \(www.gov.uk\)](https://www.gov.uk)
[Digital Voice and the landline phone switch-off: what it means for you - Which?](#)
[The road to 2027: Why the industry must navigate the digital switchover together - News, insights & events - News & resources | BT Wholesale](#)

Key Considerations

This section briefly describes some of the key areas that practices, and Health Boards / HSCPs providing support, should consider when developing their telephony service specifications.

Responsibilities

The contracting authority i.e. practice (or Health Boards / HSCPs) should ensure responsibilities are established locally at the outset for:

- discovery
- de-commissioning and management of any legacy equipment
- staff training requirements
- local infrastructure requirements
- funding

Discovery

This is an exercise to carry out an audit of the Telephony equipment in your practice.

Practices should complete an exercise which will:

- understand existing practice telephony provision e.g. local Private Branch Exchange System (PBX) based, local Voice Over Internet Protocol (VoIP) etc.
- identify all existing extensions and external lines (PSTN, ISDN, SIP) and numbers and confirm these match current billing. Identify the purpose/usage of each external number e.g. outgoing calls only, appointments line(s), alarm lines, specific clinics etc. Analyse the activity on each number and extension to identify any unused and any high demand numbers and extensions.
- identify any existing sources of stored patient identifiable data e.g. call recording, call logs and any requirement to retain this data.
- identify any third-party products, not provided directly by your telephony system vendor, integrated with your current telephony

system including clinical systems and clinical system integrators, call recording, call logging etc. Identify and understand the contracts with suppliers of these third-party products.

- identify any single purpose / dedicated lines and determine if they need to continue in that form e.g. alarms. (Note other actions, outside the scope of this document, may be needed here as PSTN (and ISDN) lines will no longer be supported after 2025).
- identify any branch sites, however small, as a cloud based VoIP telephony system should be able to support these as part of the same practice telephone service.
- Identify any locations, other than authorised practice premises and home working, where access to the telephony system may be required.
- identify if the existing system is shared with or used by any other party (i.e. multi-tenant) and if so on what basis and if there will be any impacts of changing.
- understand any existing practice mobile telephone use and contracts and consider how or if these will be affected by migrating the practice to an advanced telephony solution.
- identify how many staff currently work from home or remotely or may need to do so.
- identify where fixed IP handsets are needed (i.e. phone based VoIP) and where a software based phone application (softphone) is installed on an end user device (eg PC, laptop, tablet, smartphone) and connected to the service through broadband internet or wireless data connection. See Emergency Access considerations below.
- examine existing contract and opportunities and exit terms including notice period and costs.
- examine the expected organisational and service model developments expected locally in the future.
- assess existing connections (SWAN or equivalent) and available bandwidth to determine suitability to be used by VoIP. Requesting technical support from the Health Boards / HSCPs (as necessary) to complete this.
- determine with Health Boards / HSCPs how local digital infrastructure e.g. networks may be accessed and utilised. It is important to give this

consideration prior to issuing a specification and embarking on procurement.

Business Continuity

- practices should carry out a full review of their business continuity plans following implementation in particular reviewing the role of telephony in practice operational resilience and the resilience and contingency arrangements for the telephony service.
- practices should specify the minimum period of time telephony services should remain operational in the event of a power failure e.g. 45 minutes. This may involve support (e.g. battery backup) for local digital infrastructure and handsets. Mitigation steps may include call diversions and the use of mobile telephony.

Emergency Access

- the new Advanced Telephony Solution should comply with the current [OfCom General Conditions](#) concerning access to national emergency services from fixed locations (condition A3) such as the practice premises.
- practices may rely on their telephony service to enable staff to call for urgent help locally e.g. in a clinical or physical incident. Rapid access i.e. without the need for prior authentication steps is required in such circumstances.
- in planning the deployment of access to the telephony solution the practice should assess areas of potential risk to patients and staff particularly within fixed practice premises to determine where phone based VoIP (i.e. fixed IP handsets) are necessary. This process will be assisted by understanding the capabilities available from system provider's products.

Data Security

- data security capabilities required are covered in Table 1 Section 7. This includes the requirement for a Data Processing Agreement between the supplier (as processor) and the practice (as controller).
- the practice should complete a Data Protection Impact Assessment (DPIA) prior to implementation and regularly review this.

Specification Development

Once the discovery activity has been completed use this information to create a specification document, using the template below and adapting to suit the needs of the practice(s). When composing the Specification, the recommendation is to:

- scope the requirement in terms of organisations (practices and others) and premises.
- engage with the Health Boards / HSCPs (or the commissioned GP IT Provider) to discuss the use of practice premises SWAN connections and local network infrastructure including any new or upgraded structured data cabling requirements (see 2.8).
- assess and document what processes and ways of working the existing telephone system prevent or hinders. Consider whether these can be addressed with a new telephony solution and if so what business changes would be required to do this i.e. the new telephony solution will be an enabler but the practice and staff will still need to manage a business change.
- document what external telephone numbers will be needed – existing numbers can be ported but the same quantity of numbers may not be required if moving from a premises-based system to a cloud based hosted system.

Template Specification

An Advanced Telephony Solution (the “*Solution*”) is required to meet the needs of the general practice(s) (the “*Practice*”) operating services from authorised practice premises (the “*Service Locations*”). These are listed in Table 2.

Local organisations should review each requirement to determine local priority. Where references are listed as multiple options (eg 2.3a, 2.3b, 2.3c) local organisations should select the most applicable option.

The *Solution* will:

- support practice resilience and flexibility including remote working, home working, hub working and alternative locations (i.e. for business continuity response)
- support the *Practice* to manage large workload and demand including growth in telephone consultations
- secure good overall value for money

- support local and national planning with better information on telephony based patient interactions
- drive the convergence of General Practice telephony and general IT/digital services ensuring that general practice can benefit from the latest and most innovative technologies.

Table 1: Capabilities Required

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
		<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
<u>1</u>	a. <u>General</u>								
	<u>The Solution must provide in addition to standard business telephony capabilities</u>				X				
<u>1.1</u>	<u>As a cloud based hosted telephony service secure access via IP from the Service Locations or from any internet connected device</u>	X							
<u>1.2</u>	<u>Telephone services which support the Practice to comply with its contract (see Annex A)</u>	X							
<u>1.3</u>	<u>Integration with the Clinical System (see sections 4 & 5)</u>	X							
<u>1.4</u>	<u>Compliance with the standards described in Annex B</u>	X							
<u>1.5</u>	<u>A single service which is wholly operated and managed by the Bidder</u>	X							
<u>1.6</u>	<u>Fully cloud based infrastructure with only end user devices installed within the service location (see 8.12)</u>	X							
<u>1.7</u>	<u>Access to a regular improvement and development programme available as Solution updates (see 6.9).</u>	X							

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
		<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
<u>2</u>	b. <u>Implementation Requirements</u>								
<u>2.1</u>	<u>Existing phone number porting</u>	<u>X</u>							
<u>2.2</u>	<u>Low impact installation with minimal staff & business disruption during practice working hours. Patient telephone access to the practice and practice ability to contact patients by telephone including conducting telephone consultations must be maintained during implementation during the In-Hours period or any period used to provide appointments under the Extended Hours Directed Enhanced Service.</u>	<u>X</u>							
<u>2.3a</u>	<u>Access to 24/7 support (online and telephone) and response during and after installation</u> <u>Where the bidder is responsible for onsite infrastructure as part of the <i>Solution</i> support of this onsite infrastructure is included in this requirement.</u>		<u>X</u>						
<u>2.3b</u>	<u>Access to support (online and telephone) and response during and after installation for the In Hours period (between 08:00 - 18:30, Monday to Friday, excluding Public Holidays – or as amended in any subsequent changes to GP contracts.) or any period used to provide appointments under the Extended Hours Directed Enhanced Service</u>	<u>X</u>							
<u>2.3c</u>	<u>Access to support (online and telephone) and response during and after installation for the In Hours period as detailed in (between 08:00 - 18:30, Monday to Friday, excluding Public Holidays – or as amended in any</u>		<u>X</u>						

	<u>subsequent changes to GP contracts) or any period used to provide appointments under the Extended Hours Directed Enhanced Service</u>									
2.4	<u>High level availability (at least 99.9%)</u>	X								
2.5	<u>High quality audio (HD Voice)</u>	X								
2.6a	<u>Able to use existing NHS funded practice premises SWAN connections for primary connection</u>	X								
2.6b	<u>Able to use a dedicated data connection (not SWAN) for primary connection</u>			X						
2.7a	<u>Where fixed IP handsets (i.e. phone based VoIP) are to be used additional or upgraded on-site cabling e.g. structured CAT5e/6 will be required. These should be power over ethernet (POE) enabled to avoid the requirement for additional power outlets. The bidder will be required to provide and install the necessary infrastructure (e.g. switches) with separate IP address ranges to ensure that the telephony system is logically separated from the managed GP IT network. (See 2.8 and 8.12)</u>	X								
2.7b	<u>Where fixed IP handsets (i.e. phone based VOIP) are to be used additional or upgraded on-site cabling e.g. structured CAT5e/6 will be required. These should be power over ethernet (POE) enabled to avoid the requirement for additional power outlets. The bidder agrees to work with and comply with all standards and requirements from the Health Boards / HSCPs (or it's supplier). (See 2.8 and 8.12)</u>									
2.8	<u>The bidder will be required work with the Health Boards / HSCPs and it's supplier(s) to ensure the performance and security of practice infrastructure and essential applications throughout the implementation of the Solution</u>	X								

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
		<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
3	c. <u>Standard office telephony capabilities</u>								
	<u>Capabilities considered as standard within typical local systems installed in general practice premises. The following "Business as Usual" capabilities must be provided</u>				X				
3.1	<u>Hunt Groups</u>	X							
3.2	<u>Extensions</u>	X							
3.3	<u>Directory (internal for practice)</u>	X							
3.4	<u>External direct dial numbers (local or non-geographic)</u>	X							
3.5	<u>Call recording - automatic - user able to simply disable/enable at start or during a call</u>	X							
3.6	<u>Auto-attendant – basic services as a minimum to direct patients to out of hours services</u>	X							
3.7	<u>Other greetings and holding messages and music</u>	X							
3.8	<u>Line specific greeting messages, menu options and in queue announcements</u> (These should be easy to update locally)	X							
3.9	<u>Voicemail – can be enabled for all extensions with mandatory password/PIN access control – remote and local access</u>	X							
3.10	<u>Call forwarding – programmable & enabled by end user - for extension unattended or when busy forwarding to hunt groups</u>	X							
3.11	<u>Call waiting and call queuing capability</u>	X							

<u>3.12</u>	<u>Practice access to a configuration & administration portal or service (free to practice at point of use) which must allow the practice to configure the <i>Solution</i> to meet the needs of the individual practice independently from other practices on the same platform.</u> <u>Bidders to describe the local capabilities (e.g. recorded announcements) available through this portal/service and any limitations.</u>	<u>X</u>								
<u>3.13</u>	<u>Practice caller ID - Each practice will require to have own Calling Line Identifier (CLI) display for outgoing calls</u>	<u>X</u>								
<u>3.14</u>	<u>Handset conferencing - Conference in a 3rd party from any handset.</u>	<u>X</u>								
<u>3.15</u>	<u>In call functions e.g. Caller hold, transfer, mute, speakerphone and pause recording</u>	<u>X</u>								
<u>3.16</u>	<u>Line specific call flows for main customer line, direct to department, emergency bypass lines and DDI</u>	<u>X</u>								
<u>3.17</u>	<u>Inbound number or departmental timers automatically control the call flow during working hours, out of hours, bank holidays or training days.</u>	<u>X</u>								
<u>3.18</u>	<u>Call monitoring ("listen in") e.g. as used in staff training / induction or when dealing with difficult callers</u>	<u>X</u>								
<u>3.19</u>	<u>Automated call back when call are queuing (sometimes referred to as queuebuster).</u>	<u>X</u>								

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
		<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
<u>4</u>	d. <u>Integration with Clinical System</u>								
	The <i>Solution</i> must be able to integrate with accredited Clinical System(s) used by the <i>Practices</i> .								
	<u>Integration capabilities required are described in section 5.</u>								
<u>4.1</u>	<u>Cedgidm Vision</u>	X							
<u>4.2</u>	<u>Integration with the Clinical Systems must be available as part of the <i>Solution</i> offer from the <i>Bidder</i> who will provide single point of access to incident and problem management services.</u>	X							
<u>4.3</u>	<u>To retain the resilience and benefits of cloud based hosting of telephony and clinical systems integration with the Clinical Systems must not be dependent on the installation of service location based software, hardware or other infrastructure (see 8.12).</u>	X							
<u>4.4</u>	<u>The <i>Solution</i> must be able to integrate with the following other Clinical Systems used by the <i>Practices</i> or other organisations in scope of the service specification (see Table 2). Integration capabilities required are described in section 5.</u>								

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
		<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
5	e. <u>Advanced Capabilities</u>								
5.1	<u>Demand Management</u> To support high and variable incoming call traffic – capabilities including				X				
5.1.1	<u>Auto-attendant</u>	X							
5.1.2	<u>Configurable demand management e.g. rules based re-routing, queue management</u> <u>Configuration must support patient safety considerations in particular ensuring unanswered routed calls are returned to a default e.g. reception</u>	X							
5.1.3	<u>Locally configurable Interactive Voice Response (IVR) for incoming call handling e.g. patient triage</u>	X							
5.1.4	<u>Cloud based incoming call queuing (no practical limit)</u>	X							
5.1.5	<u>Outgoing call capacity not limited by incoming call demand</u>	X							
5.1.6	<u>Queue position announcement</u>	X							
5.1.7	<u>Call activity & performance logging & reporting – allowing practices to analyse demand across time and days. This should include abandoned calls, caller waiting times, average queue length, busy hour reporting, attendant availability etc.</u>	X							
5.1.8	<u>Reporting to meet national access reporting requirements relevant to practice telephony systems as published. Bidders must commit to supporting these reporting requirements when published.</u>	X							

<u>5.1.9</u>	<u>Integration for incoming calls with the <i>Clinical System</i>: To identify vulnerable patients and prioritise call queues, route patients to specific teams or resources</u>		<u>X</u>						
<u>5.1.10</u>	<u>Call-back options including SMS call-back</u>		<u>X</u>						
<u>5.2</u>	<u>Resilience and Business Continuity</u> <u>To support General Practice Resilience, Business Continuity and Workforce Flexibility</u>				<u>X</u>				
<u>5.2.1</u>	<u>Management and re-routing of incoming calls both within a general practice and to alternative numbers in general practices and services within the same Health Board / HSCP boundary.</u>	<u>X</u>							
<u>5.2.2</u>	<u>Can re-direct incoming calls to other practices if required e.g. if practice needs to close.</u>		<u>X</u>						
<u>5.2.3</u>	<u>Access to the practice telephony system from any location with appropriate public internet access including domestic broadband and mobile data network.</u>	<u>X</u>							
<u>5.2.4</u>	<u>User Devices supported (subject to Infrastructure Requirements) will include</u> • <u>Fixed IP phones</u>	<u>X</u>							
<u>5.2.5</u>	<u>User Devices supported (subject to Infrastructure Requirements) will include</u> • <u>Desktop Apps / softphones</u>	<u>X</u>							
<u>5.2.6</u>	<u>User Devices supported (subject to Infrastructure Requirements) will include</u> • <u>Mobile Apps</u>		<u>X</u>						
<u>5.3</u>	<u>Models of Care</u> <u>To support effective, efficient, and advanced models of primary care</u>				<u>X</u>				
<u>5.3.1</u>	<u>Supporting multiple practice collaborations e.g. with telephone access supporting shared functions such</u>	<u>X</u>							

	<u>as appointment booking, scheduling, triage and out of hours care. A shared “group” directory must be available.</u>									
<u>5.3.2</u>	<u>Other local organisations and their staff may use the same telephony <i>Solution</i> because for example they co-locate premises with the practice, or they jointly provide services with the practice. The <i>Solution</i> should be extendable to support those organisations either discretely or with shared functions.</u>	<u>X</u>								
<u>5.3.3</u>	<u>Ability to integrate and federate with other IP telephony systems – to enable collaboration between multiple stakeholder organisations where existing IP telephony solutions are embedded and/or under contract.</u>		<u>X</u>							
<u>5.3.4</u>	<u>Integration for outgoing calls to patients with the practice <i>Clinical System</i>: to support telephone consultations and general administration. This must allow the end user working from any location which has access to both the <i>Solution</i> and the <i>Clinical System</i> using an approved NHS managed device to initiate a call to the patient from the patient record displayed in the <i>Clinical System</i>.</u>	<u>X</u>								
<u>5.3.5</u>	<u>Integration for outgoing calls to patients with the practice <i>Clinical System</i>: User option to log the outgoing call event in the patient record</u>		<u>X</u>							
<u>5.3.6</u>	<u>Video Conferencing capabilities with appropriate security assurances used for peer-to-peer conferencing and consultations.</u>		<u>X</u>							
<u>5.3.7</u>	<u>Single click switch from phone to video consultation using softphone</u>		<u>X</u>							

5.4	Efficiency				X				
5.4.1	<u>Simple user switch between taking calls on desk phone and on mobile</u>		X						
5.4.2	<u>SMS outgoing integration with <i>Clinical System</i></u>		X						
5.4.3	<u>Integration for incoming calls with the <i>Clinical System</i>: to support general administration automatic identification of patient's record. This should include adequate measures to protect accessing a patient record based on a caller ID which has been spoofed.</u>		X						
5.4.4	<u>Integration for incoming calls with the <i>Clinical System</i>: to log the incoming call event in the patient record</u>		X						
5.4.5	<u>Integration for incoming calls with the <i>Clinical System</i>: to support patient self-serve (using auto-attendant functionality) including appointment booking, repeat prescription request.</u>		X						
5.4.6	<u>Integration for incoming calls with the <i>Clinical System</i>: to support practice data capture. Using IVR or other automated processes patients can provide data as prompted to assist practice data capture needs.</u>		X						
5.4.7	<u>Unified Communications including integration with email and collaboration platforms e.g. Microsoft Teams</u>		X						
5.4.8	<u>Integration with M365 and Microsoft Teams</u>		X						

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
		<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
<u>6</u>	f. <u>Charges</u>								
	<u>Bidders must provide details on the following (6.1 – 6.6)</u>								
<u>6.1</u>	<u>Licensing – where the <i>Solution</i> requires licences for a defined number of users to state whether these are charged per named user or per concurrent user</u>	<u>X</u>							
<u>6.2</u>	<u>Licensing – what is the impact on multiple organisations, groups, and hubs on licensing cost (see notes About General Practices).</u>	<u>X</u>							
<u>6.3</u>	<u>Connectivity – how the practice is connected to the hosted <i>Solution</i> i.e. SWAN or other as permitted in this specification and if costs related to this connectivity are included</u>	<u>X</u>							
<u>6.4</u>	<u>Identify components of the <i>Solution</i> which require to be purchased and those which are provided as part of the rental or service charge</u>	<u>X</u>							
<u>6.5</u>	<u>A comprehensive call charging plan should be provided with the <i>Solution</i>. This may either be integrated within the overall revenue cost of the <i>Solution</i> or as a separate tariff. In either case there must be significant sustainable savings available over access to conventional call charges in a locally hosted PBX with ISDN2 circuits.</u>	<u>X</u>							
<u>6.6</u>	<u>Where an inclusive fixed tariff plan is provided allowing unlimited UK landline and mobile calls any limitations, including “fair use policies” must be clearly explained.</u>	<u>X</u>							
<u>6.7a</u>	<u>Practices may co-locate with other practices and other health & social care services (organisations) and use the same</u>	<u>X</u>							

	<u>Solution. Multiple practices and other health & social care organisations may use the <i>Solution</i> at different locations within a local cluster or HSCP footprint. The capability is required to charge these organisations separately (this may be through setting up different virtual user organisations or groups). This should be done at billing stage by supplier.</u>									
<u>6.7b</u>	<u>Practices may co-locate with other practices and other health & social care services (organisations) and use the same <i>Solution</i>. Multiple practices and other health & social care organisations may use the <i>Solution</i> at different locations within a local cluster or HSCP footprint. The capability is required to charge these organisations separately (this may be through setting up different virtual user organisations or groups). Locally accessible reporting tools will be provided to allow timely internal re-charging to take place.</u>			<u>X</u>						
<u>6.8</u>	<u>On net calling within the practice and within practice groups (e.g. branch sites) are free</u>	<u>X</u>								
<u>6.9</u>	<u>Future updates and new features (within purchased modules) at no extra charge during contract (see 1.7)</u>	<u>X</u>								

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
		<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
7	g. <u>Data Security & Governance</u>								
7.1	<u>The Solution in using the practice managed digital infrastructure must not introduce unacceptable risk to the managed practice infrastructure (e.g. by unmanaged bridging to the internet). Bidders must provide detail on their security management arrangements.</u>	X							
7.2	<u>System configuration and the retrieval of any stored patient identifiable information including voicemail, call recordings, call logs must as a minimum require user identification and strong password authentication. Increased security for access to patient identifiable data should if possible be provided (e.g. multi factor authentication or access only over a VPN). Access to patient identifiable data must be recorded in an access audit trail.</u>	X							
7.3	<u>Recorded calls must be held at a quality level which allows the recording to be of legally admissible standard</u>	X							
7.4	<u>The following patient identifiable data may be held within the Solution at cloud level</u> <ul style="list-style-type: none"> - <u>Outgoing number dialled (no other demographic or clinical data)</u> - <u>Incoming number received (no other demographic or clinical data)</u> - <u>Recordings of practice-patient conversations</u> - <u>Voicemail recordings</u> <u>Any other patient identifiable data stored, including temporary storage during processing activities, within the Solution must be disclosed</u>	X							
7.5	<u>Stored data patient identifiable data including call recording and voicemail must be held on encrypted infrastructure in a UK based</u>	X							

	<u>secure data centre. The <i>Solution</i> must not require the storage (temporarily or permanently) of any patient identifiable data within the service locations.</u>									
<u>7.</u>	<u>Recorded calls must be stored EITHER in a non-proprietary format (e.g. MP3) OR if stored in a proprietary format a facility is available to decode to a non-proprietary format on demand and at no cost (e.g. in event of termination of service)</u>	<u>X</u>								
<u>7.6</u>	<u>As a default recorded calls must be held securely for a period of a minimum of 1 year with a capability available for retention up to 6 years (where practices consider the recorded conversation may be needed for clinical negligence or other legal purposes). Individual practices, as data controllers, will however be able to determine the retention period for recorded calls for their practice. Bidders must describe their arrangements for the destruction, disposal, and local archiving (as needed) of recorded call data after the retention period.</u>	<u>X</u>								
<u>7.7</u>	<u>The bidder must provide clear, accessible, and efficient process to manage any security issues raised or identified</u>	<u>X</u>								
<u>7.8</u>	<u>The individual GPcontractor must be able to exercise its legal responsibilities as data controller with respect to any data accessed by or stored within the <i>Solution</i>, including those patient data items listed above.</u>	<u>X</u>								
<u>7.9</u>	<u>A data processing agreement which provides assurance that the bidder organisation has : <i>“sufficient guarantees to implement appropriate technical and organisational measures in such a manner that the processing will meet the requirements of this Regulation and ensure the protection of the rights of the data subject”</i> as required under the General Data Protection Regulation (GDPR).</u>	<u>X</u>								
<u>7.10</u>	<u>Where the <i>Solution</i> integrates with patient records in the <i>Clinical System</i> it must</u> a. <u>be limited to those records which the practice has authority to access.</u>	<u>X</u>								

	<p>b. <u>be lawful, i.e. is it really compatible with the purpose for which the data was collected? e.g. automatically finding a patient's number to call them for a telephone consultation</u></p>								
<u>7.11</u>	<p><u>Where the individual general practice may be part of a larger group. The <i>Solution</i> must support operating across these larger organisations with individual general practices being able to</u></p> <p>h. <u>Allow access by other organisations to stored patient identifiable data (7.4) for the practice held within the <i>Solution</i></u></p> <p>i. <u>Where there is integration with the records of registered patients between the <i>Solution</i> and the <i>Clinical System</i> and all organisations use the same <i>Clinical System</i>, to allow this integration to extend to other organisations within the group (where this is supported by the <i>Clinical System</i>)</u></p>	X							

Ref	Capability	Requirement				Bidder Response			
		Must do	Optional	Not required	Information only	Fully met	Partially met	Not met	Not applicable
8	j. Infrastructure & Networking								
8.1	<u>Use of managed GP IT infrastructure for telephony must not negatively impact on the performance of <i>Clinical Systems</i> in the practice.</u>				X				
8.2	<u>SWAN connections are recommended to be used to support the <i>Solution</i> (subject to the conditions described in 8.3.a and 8.4). Note: However VoIP is not a core SWAN service provided by the SWAN supplier</u>				X				
8.3.a	<u>Where an SWAN connection is used (see 8.5.a, 8.5.b): The Health Board and the local SWAN provider will prior to any agreement to implement the <i>Solution</i> review</u> (i) <u>existing data services e.g. bandwidth</u> (ii) <u>(ii) changes required to practice premises network infrastructure to support security and Quality of Service (QoS) for satisfactory performance of both the IP Telephony Service and the <i>Clinical System</i></u> (iii) <u>(iii) with practice any requirements to retain or supplement dedicated line(s) for external breakout for backup purposes.</u>				X				
8.3.b	<u>Where an external data connection other than SWAN is used (see 8.5.c, 8.6): The Health Board / HSCP will prior to any agreement to implement the <i>Solution</i> review and advise on (i) changes required to practice premises network infrastructure to support security (ii) any security requirements necessary to protect practice digital infrastructure and existing SWAN connections.</u>				X				

<u>8.4</u>	<u>The Solution will be approved for access through SWAN services</u>	<u>X</u>								
<u>8.5.a</u>	<u>The Solution will be accessed through the primary SWAN connection to the Service Location.</u> <u>The bidder will work with the SWAN supplier and the Health Board / HSCP to ensure the performance and security of practice infrastructure and essential applications.</u>	<u>X</u>								
<u>8.5.b</u>	<u>The Solution will be accessed through an additional (secondary) SWAN connection to the Service Location.</u> <u>The bidder will work with the SWAN supplier and the Health Board / HSCP to ensure the performance and security of practice infrastructure and essential applications.</u>		<u>X</u>							
<u>8.5.c</u>	<u>The Solution will be accessed through a dedicated external data connection other than SWAN at the Service Location to support the Solution.</u> <u>The bidder will work with the Health Board / HSCP to ensure the performance and security of practice infrastructure and essential applications.</u>		<u>X</u>							
<u>8.6</u>	<u>The Solution will support automated fail over access through alternative IP connectivity to the practice Service Location e.g. using a dedicated external data connection other than SWAN or an SWAN connection</u>	<u>X</u>								
<u>8.7</u>	<u>All Service Location must be able to access same Solution allowing call transfers throughout the practice and access to all practice locations & services through same public facing telephone numbers</u>	<u>X</u>								
<u>8.8</u>	<u>To facilitate remote working (including home working) or working from a location outside the Service Locations the Solution should securely extend the practice telephony for access outside the Service Location in such a way as to</u>	<u>X</u>								

	<p>emulate the in-practice experience. The <i>Solution</i> must utilise for remote working either by any of the following methods</p> <ul style="list-style-type: none"> • <u>SWAN circuits where available</u> • <u>a public internet broadband connection using a means of secure VPN access to SWAN</u> • <u>through softphone within an approved VDI platform (used to access <i>clinical system</i> and other data services)</u> • <u>an option to use the remote/home worker's landline</u> • <u>via mobile phone using either PSTN access or an encrypted softphone app using mobile data or Wi-Fi.</u> <p>Bidders should give details of remote working facilities provided in their proposal</p>								
<u>8.9</u>	<p>The <i>Solution</i> will be able to operate within a VDI environment without additions or system changes</p>	<u>X</u>							
<u>8.10</u>	<p>The <i>Solution</i> must support the practice business continuity arrangements, as a minimum allowing the practice to operate from a location outside the <i>Service Location(s)</i> using one or more of the remote working connectivity approaches described in 8.8.</p>	<u>X</u>							
<u>8.11</u>	<p>As a cloud based <i>solution</i> installation of equipment and software at <i>service locations</i> should be minimal. The following may be installed in <i>service locations</i> subject to the agreement of both the practice and the Health Boards / HSCPs.</p> <ul style="list-style-type: none"> • <u>Fixed IP handsets (i.e. phone based VoIP). These should be power over ethernet (POE) enabled to avoid the requirement for additional power outlets</u> • <u>Softphone applications for end user devices</u> 	<u>X</u>							

	<ul style="list-style-type: none"> • <u>Dedicated network infrastructure (switches) with separate IP address ranges to ensure that the telephony system is physically separated from the managed practice digital network.</u> • <u>NB Alternatively logical network separation (VLANs) may be used if agreed and supported by the Health Board / HSCP.</u> <p><u>The following is not permitted to be installed at service locations</u></p> <ul style="list-style-type: none"> • <u>Tools which allow the bidder to remotely access any part of the practice managed I.T. infrastructure including end user devices</u> • <u>Databases or other applications which store patient identifiable data</u> • <u>Additional processing hardware and software e.g. Middleware to support the Solution or it's integration with the Clinical System</u> 									
<u>8.12</u>	<u>The bidder will be required to work with the Health Board/ HSCP to ensure the performance and security of practice infrastructure and essential applications during the use of the Solution</u>	<u>X</u>								

<u>Ref</u>	<u>Capability</u>	<u>Requirement</u>				<u>Bidder Response</u>			
<u>9</u>	k. <u>Bespoke & Local Requirements</u>	<u>Must do</u>	<u>Optional</u>	<u>Not required</u>	<u>Information only</u>	<u>Fully met</u>	<u>Partially met</u>	<u>Not met</u>	<u>Not applicable</u>
<u>9.1</u>		X							
<u>9.2</u>									
<u>9.3</u>									
<u>9.4</u>									
<u>9.5</u>									

I. Table 2: Practices. Organisations & Locations

Practices may operate from more than one *practice premises* e.g. branch sites and some services may be provided from other locations directly by the practice or by a sub-contracted organisation. *Practices* may co-locate with other *Practices* and/or provider organisations e.g. multi-function health centres. If other organisations not providing GP services are to be included in scope they are also listed here.

	<u>{Practice}</u>	<u>{Practice}</u>	<u>{Practice}</u>	<u>{Practice}</u>	<u>{Practice}</u>	<u>{Practice}</u>
<u>{Location}</u> <u>{Name}</u> <u>{Postcode}</u>	<u>{Extensions Required}</u> <u>{is this a registered practice premises ?}</u>					
<u>{Location}</u> <u>{Name}</u> <u>{Postcode}</u>						
<u>{Location}</u> <u>{Name}</u> <u>{Postcode}</u>						
<u>{Location}</u> <u>{Name}</u> <u>{Postcode}</u>						
<u>{Location}</u> <u>{Name}</u> <u>{Postcode}</u>						
<u>{Location}</u> <u>{Name}</u> <u>{Postcode}</u>						
<u>HOME/REMOTE WORKING</u>	<u>{number staff}</u>					

Annex A: GP contract (extract from GMS Contract and PMS Agreement regulations)

Telephone services

2.—(1) The contractor must not be a party to any contract or other arrangement under which the number for telephone services to be used—

*(a) by patients to contact the practice for any purpose related to the contract;
or*

(b) by any other person to contact the practice in relation to services provided as part of the health service,

starts with the digits 087, or 09 or consists of a personal number, unless the service is provided free to the caller.

(2) In this paragraph, “personal number” means a telephone number which starts with the number 070 followed by a further 8 digits.

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Annex B: Benefits

Existing/legacy system scenario & limitations	Advanced Telephony Enabling Functions	Outcome or Benefit
Incoming & outgoing lines are limited to the fixed service delivered to the practice premises and the capacity of the local PBX & onsite infrastructure	Incoming and outgoing lines are dynamically drawn from cloud pool so that lack of in/out line availability Automatically offer patients alternative services when contacting primary care out of hours or when 'line busy' can ensure patients receive timely attention Cloud based VOIP telephony will be "service" based (not equipment based) and will be readily scalable (up or down)	Support major increase in telephone consultations Practice able to handle peaks in demand Improved patient experience Meet needs of organisational change including growth, collaborations, mergers, splits, and closures
Redirection on incoming calls for out of hours/extended hours may be very limited functionally or at worst based on a pre-recorded voice mail redirection message	Automated (programmed) or manual direction of incoming calls to hubs, alternative locations, out of hours sites etc Use of automated attendant and IVR to route calls based on need and availability	Better and safer patient experience Reduced (clinical) risk especially out of hours
Expensive to maintain, upgrade (capital) and operate (line rental and call charges)	Outgoing calls on cheaper at scale tariff – may be built into fixed service charge Internal calls (on-net) should be at no-cost	Significant savings on operating costs expected even with increased activity

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<p>Legacy PBX analogue systems may not be well supported or not supported by future development work i.e. a “burning platform”</p>	<p>Cloud based VOIP will be centrally maintained and should expect investment in support and development in line with the scale of use</p>	<p>Security for practices and supporting business continuity</p>
<p>Reporting capabilities very limited. No understanding of failed or abandoned access</p>	<p>Reporting outputs from the telephony solution to better understand demand patterns, system capacity and expected patient behaviour</p>	<p>Better practice resource planning Improved patient experience Comply with national reporting as it develops</p>
<p>Premises based telephony means practices within same PCN and even branches of same practice cannot benefit from using same telephone service</p>	<p>Automated and manual redirection to staff, teams, and practices anywhere within the group (PCN) Single directory No cost easy conference calls for teams</p>	<p>Improve efficiency with easy access to all staff and teams Improved patient experience</p>
<p>Legacy systems may only be readily accessed within the practice premises</p>	<p>Access from locations outside the practice i.e. mobile, community and home</p>	<p>More efficient use of estates future as practice staff able to work from a range of locations Reduce travel time for staff Improve staff recruitment and retention with flexible working capability</p>
<p>Local practice premises hosted telephony infrastructure (lines and PBX) creates critical dependency on the premises remaining operationally viable. At risk from</p>	<p>Telephony services (and clinical system) not dependant on presence of infrastructure hosted within general practice premises Access from locations outside</p>	<p>Can offer a cornerstone for Business continuity plans and practice resilience</p>

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floods, fire, and access incidents.	the practice i.e. mobile, community and home	
No integration with practice OC and VC systems	Integrate with practice OC and VC systems	Practice efficiency improvements Improved patient experience
No standard facility or integration to support peer-to-peer VC and collaboration activities. Where happens usually needs a separate technology	Integrate with MS Teams for peer-to-peer VC and collaboration activities such as case conferences	Improved quality of care Better clinical risk management Reduce travel time for staff
No integration with practice clinical system	Cloud based telephony-clinical system integration	Practice efficiencies Time saving for clinical staff e.g. one click dial up Supports telephone consultations Improved patient experience
Integration with practice clinical system based on locally installed middleware applications which require interface to local infrastructure with complexity and security challenges	Clinical System integration managed at cloud level (as both telephony and clinical system are "cloud" based) Opportunities for more advanced telephony-clinical system integration benefiting from at scale deployment and centralised interfaces	Reduced cost No local cyber security issues from infrastructure boundary issues No local management overhead More efficiencies but also quality and data improvements

Annex C: Glossary

ATE - Alarm Transmission Equipment

Bidder - Suppliers offering to provide services meeting this specification

CLI – Calling Line Identifier

Clinical System - The Foundation Solution for patient record management.

CSP – Communication Service Provider

Extended Hours Directed Enhanced Service – an optional service provided by GP practices out with the In Hours period at regular intervals

GMS - General Medical Services

GP contract – the General Medical Services (GMS) contract held by most general practices or the Primary Medical Services (PMS) Agreement held by the remainder of independent GP contractors

In Hours period - between 08:00 - 18:30, Monday to Friday, excluding Public Holidays

IP – Internet Protocol

ISDN - Integrated Services Digital Network

IVR - Interactive Voice Response

ITU - International Telecommunication Union

PBX - Private Branch Exchange

PMS – Primary Medical Services

POE – Power over Ethernet

Practice – The General Practice organisation (holding a GMS contract)

Practice Premises – the address specified in the GP contractor's contract or agreement as one at which services are to be provided under the contract or agreement

PSTN – Public Service Telephone Network

Service Location – The location(s) where the practice telephony system will be used. This includes the Practice Premises (above) and any other location agreed by the practice and the Health Board / HSCP

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Solution – An Advanced Hosted (cloud based) Telephony Solution for general practices meeting the requirements of this specification

Supplier Asserted Integrations – Interoperability interfaces prepared by a supplier and not specified or assured by the NHS

SWAN – Scottish Wide Area Network

VDI – Virtual Desktop Infrastructure

VOIP – Voice Over Internet Protocol. The term IPT may also be commonly used, sometimes also referred to as Internet Protocol (IP) Telephony