# PNC**7**

## Next generation monitoring centre software



**Tunstall**

# Introducing **PNC7**

**PNC7** represents a new benchmark in the development of monitoring centre software, providing a powerful, reliable and scalable technology platform that is easier to use, more flexible, and more efficient than ever.

The latest generation of PNC builds on Tunstall's heritage of providing groundbreaking, robust software and enhances this with vital business intelligence tools, assistive workflow and intuitive functionality to underpin the delivery of effective, sustainable services both now and in the future.

Uniquely, **PNC7** has been developed to be person-centred rather than dwelling-based. This, combined with the capability to integrate with existing systems, provides an unrivalled platform for holistic care planning across housing, health and social care.

In addition to its new, innovative features, **PNC7** incorporates numerous technological refreshes which, as well as enabling centres to undertake core business activities more effectively by making the system easier to navigate and interrogate, will also empower them to expand their service offering.

Web-based modules such as Information Manager and Service Manager extend the opportunities for flexible staff deployment using a range of mobile devices, providing independence of location.

Built on the Microsoft stack of technologies, **PNC7** offers unparalleled integration opportunities and its new data model supports the consolidation of activities across multiple centres. This means that PNC7 can enable interworking of multiple centres, whilst securely segregating personal information. It can be deployed locally, virtualised or remotely hosted, and supports local or remote disaster recovery.

**PNC7** represents a huge step forward in the development of monitoring centre technology, providing a firm base for the evolution of centres and delivering maximum value from your investment. Whether you require a stable solution for a small monitoring centre, or you need the capability to support operators working on behalf of numerous organisations and the flexibility to manage telecare and telehealth services using the same system, **PNC7** provides the ultimate platform.

# Key features

## Scaleable

**PNC7** supports from single operator to over 200 operator use, with hundreds of thousands of end-user connections. Multi-centre operations are supported, with secure fail-over between sites and robust data segregation. Systems can be configured and modules integrated according to the individual needs of the centre, creating a flexible platform for service delivery which can take account of current and future requirements.

## Resilient

**PNC7** is extremely robust, with high levels of fault tolerance ensuring unsurpassed system availability. This supports fail-safe, critical monitoring of dispersed alarms, telecare alarms, hardwired schemes, security dialers, lone worker via IVR and mobile locatable devices for lone workers, domestic violence and people with dementia. It also supports Tunstall's new protocol, known as Sequential Tone Multi Frequency (STMF), which allows networks to accurately replicate its tones and is resilient against network mechanisms that can corrupt DTMF signalling.

## Efficient

**PNC7**'s Operator Assistive Workflow tool provides a helping hand to operators, giving a step-by-step onscreen guide to procedures as they handle calls. Particularly when centres are handling calls on behalf of a number of clients, this helps to ensure continued high performance levels. PNC7 Service Manager module allows greater efficiency in telecare operations through its support for referral processes, equipment stock allocation, activity scheduling and integration options with care planning systems. System users are supported by intuitive on-screen applications.

## Flexible

**PNC7**'s web-based technology means the system can be installed at local sites or can be accessed from any secure location, enabling operational models that are independent of worker location and offering ultimate flexibility when it comes to disaster recovery and business continuity. **PNC7** allows telecare equipment in the field to be programmed from the monitoring centre, enabling settings to be adjusted remotely and replacement pendants to be programmed and then posted to the service user (subject to the capability of the field based equipment).

## Open

**PNC7** provides more third party communication protocols and equipment types than any other control centre system. As well as Tunstall's own protocols, **PNC7** supports standards- based protocols. This means that telecare can be tailored to the needs of individuals and service providers, rather than limited by centre capability. **PNC7** is built on the Microsoft technology platform, making it possible to integrate with third party systems and for centres to operate on behalf of other organisations. Examples include integration with care referrals, and coupling with financial systems for service billing.

## Future-proofed

**PNC7** supports IP telephony and PSTN type communication. The system employs state-of- the-art database and technology components. **PNC7** also allows enhancements and additional modules to be integrated at a later date, enabling the system to adapt to the changing needs of the centre and keep pace with advances in technology.

# At a glance

### Device types

**PNC7** Supports fail-safe, critical monitoring of the following types of devices and systems:

- Dispersed alarms including social alarms and telecare

- Grouped housing schemes

- Lone worker via Interactive Voice Response

- Mobile locatable devices for lone workers, domestic violence, dementia and other vulnerable users

- Security diallers

### Telephony and calls handling

PNC7 supports 4 to 1023 lines, 1 to 200+ operators and accepts calls traffic from:

- Analogue lines

- Digital lines

- IP/SIP calls

- Cellular connections

- POTs calls

Lines are multi-protocol, reducing infrastructure and on-going telephony costs.

## Core functionalility

## Feature Overview

### Architecture

**PNC7** has been developed on the Microsoft technology platform, including SQL Server database, with new applications using the .NET4 framework, and supports the latest Windows 8 operating system. Employing this widely-used platform supports the consolidation of systems and telephony and is part of Tunstall's strategic aim to standardise software development.

VoIP is supported on **PNC7**, enabling centres to manage voice and data calls from VoIP alarm units and enable centre operations across VoIP phone systems. Using a unified communications platform provides centres with the ability to receive and distribute calls from any alarm raising equipment, delivering the ultimate flexibility.

Unique to **PNC7** is its ability to support Tunstall's patented STMF protocol, providing resilience against the changes in underlying telephony infrastructure, which may become increasingly problematic to DTMF signalling.

**PNC7**'s Service Manager and Information Manager modules are both delivered exclusively using web-based technologies and data warehousing. Business analytics and dashboards

can be delivered through a variety of mobile working devices, removing the limitations on worker location enabling flexible staff deployment.

### Resilience

**PNC7** is tested as resilient and performant from a single PC implementation to all the way up to more than 200 concurrent call handling operators. It is highly fault tolerant and adheres to the strictest regulatory requirements laid down by data protection acts, the FDA and HIPAA.

### Consolidation

**PNC7** contains a fully partitioned database, which allows multiple organisations to interoperate their call-handling and operational processes. The data model enables the integration of multiple PNC7 systems onto a single software infrastructure, making it possible to broker relationships between centres, creating efficiency gains by consolidating high-cost activities such as out of hours monitoring, planned outages and disaster recovery.

## Case Management

The Case Manager module supports operators in managing activities such as dispatching responders, managing critical events (such as falls and ambulance call outs), managing general incidents, and monitoring equipment service tasks. This tool is of great value in monitoring the quality of service delivery and focuses directly on the specific services provided by each monitoring centre.

## Core capabilities:

- Full remote reprogramming - for all Tunstall home units as well as most third party devices.

- Door entry - including webcams, online operator assistance and case management tool.

- Scheme auto test - automated out of hours check on scheme equipment operation.

- CLI-based calls - phone calls received by the centre will pull up records from different areas of the system based on the calling telephone number.

- System monitoring and auto-reporting - engineering and management alerts are configurable by SMS, email and Net Send.

- Incident and case management.

## System enhancements

## Enhanced operator support

### Data Navigator

**PNC7** offers a powerful new search facility which enables users to quickly and easily browse the content of databases, drilling down through information subsets to find relevant content.

### Operator Assistive Workflow

An operational workflow tool which guides operators through appropriate procedures for calls handling, enabling them to easily adapt processes for managing different customer and call types. The intuitive system provides onscreen indication of the 'next steps' in any scenario with regard to agreed protocol, increasing operational efficiency and improving adherence to procedures.

### Bi-directional SMS

Onscreen SMS messages can be sent and received, and recorded on client records, giving operators an additional, easy means of instant communication even during active calls.

## New modules – optional, integrated

- Dashboards
  Built on a data warehouse, this component gives easy access to trended information on referrals, assessments, installation and response times, to enable efficient management of services and the ability to track performance against KPIs and SLAs

Additionally there is a distribution agent, allowing reports to be saved, distributed and scheduled, and the reporting environment affords the ability for bespoke reports to be tailored and saved.

### Service Manager

The Service Manager module supports the efficient running of the service, keeping track of the delivery process throughout the lifecycle, which will include assessment, referral, installation, change request, asset management and decommissioning. This tool is accessible through a web browser.

### Information Manager

Exclusive to **PNC7**, the module provides web portal access to reporting and business intelligence environments.

- PNC7 Reporting
  Delivering multiple operational reports from the control centre database, essential to the delivery of compliant services

- Service Manager Reporting
  Delivering stock control and service activity output from the Service Manager database

Please note; some aspects of PNC7 functionality are dependent upon the required hardware and software being place.
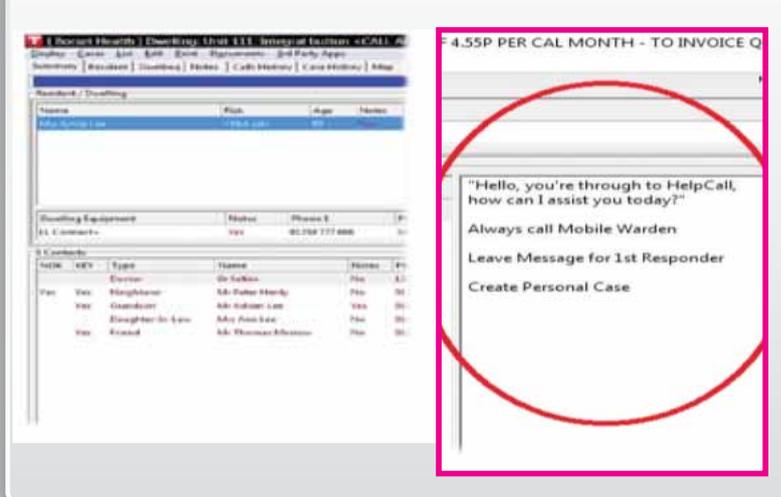
# Operator Assistive Workflow

In a busy monitoring centre, especially one handling calls on behalf of multiple organisations, it can be difficult to know which operational protocols should be followed for each call. Different contracts may require different actions – the management of door entry calls, procedures for informing scheme managers, and the opening of new cases for example.

**PNC7**'s Assistive Workflow functionality guides operators through appropriate procedures for calls handling enabling them to easily adapt processes for managing different customer and call types. The intuitive system provides onscreen indication of the 'next steps' in any given scenario, according to agreed protocol.

## Benefits

• **Supports the delivery of an improved, personalised service**

• **Easy and quick to use with no need to refer to documentation**

• **Increases accuracy and adherence to protocols**

In a busy monitoring centre it can be difficult to know what operational protocols should be followed for each call.



"Hello, you're through to HelpCall, how can I assist you today?"

Always call Mobile Warden

Leave Message for 1st Responder

Create Personal Case

• Different contracts may require different actions – the management of door entry calls, procedures for informing wardens and scheme managers, opening of new cases

• The Operator Assistance tool enables monitoring centres to present this information to operators in a simple format for each Authority and Call Type

• This reduces the chance of errors, provides access to instructions without the need to refer to documentation, and delivers a more personalised service

# Information Manager

Information Manager is a flexible web based reporting solution that delivers reporting across PNC subsystems, including Service Manager. Simple and intuitive to use, the reports can be customised to meet the specific requirements of the control centre or its customers.

The tool allows managers to save reports easily and automatically schedule and distribute tailored outputs in a variety of formats, removing the need to run numerous reports manually and send them onwards to recipients.

The portal may also include dashboards that give easy access to statistics on referral, assessment, installation and response times to enable efficient management of service and the ability to track performance against KPI's, SLA's and industry codes of practice.

An optional data warehouse provides consolidated business intelligence from across the Tunstall suite of software.
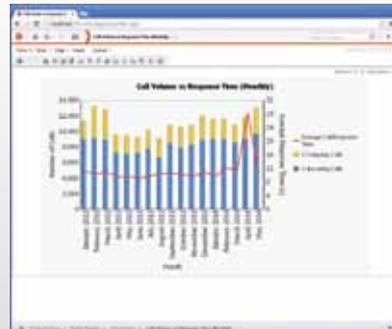
## Benefits

- **Delivers operational reporting**
- **Provides vital business intelligence**
- **Enables efficient management of services**
- **Easy to use dashboard and reports tool**
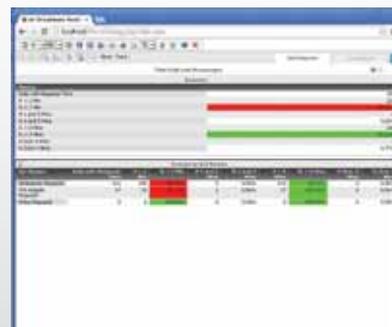


Line utilisation trend



Call volume trend



Microstrategy user interface



TSA dashboard

# Service Manager

The Service Manager module supports the efficient running of a telecare service, keeping track of the delivery process from end-to-end, through assessment, referral, installation, change requests, asset and battery management and decommissioning.

Service Manager can provide interfaces to Care Management systems, automating for example referral processes.

Crucially, Service Manager also enables the recording of client outcomes, helping to evaluate the impact of the service as a whole and of any initiatives that may be in place, e.g. a Falls Management Programme.

## Benefits

- **Single point of access for all management tasks**
- **Reduces data entry duplication and associated errors**
- **Handling changes to staff workloads**
- **Managing equipment and data onboarding**
- **Optional linkages to social care, assessment and warehouse systems**

## Mrs Bennett's story

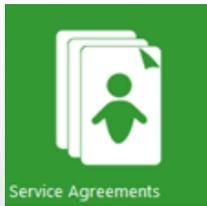Mrs Bennett, 81 has been recently discharged from hospital following a fall.

## Referral
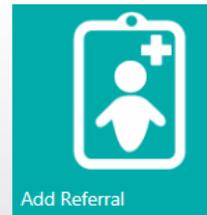
**Add Referral**

New referral created for Mrs Bennett capturing details from agency referral form.

## Service Agreement

**Service Agreements**

A service agreement is created to ensure Mrs Bennett receives a high quality, co-ordinated service.

## Assessment

Mrs Bennett's needs are assessed and appropriate equipment selected.

## Inventory

**Inventory**

Equipment is selected, programmed and synchronised to PNC prior to installation.

## Management

Service Manager tool co-ordinates necessary processes to ensure smooth on-going maintenance delivery.

# Benefits

**PNC7** has a wealth of new functionality and unique features designed to support the delivery of an efficient monitoring centre service, and delivers benefits for all stakeholders.

## Operator Benefits

- All calls are delivered seamlessly to the desktop regardless of source (analogue, digital, SIP/IP). The interface will enable options and actions that are relevant to the call type without operator intervention.

- Operator Assistance will guide the operator on relevant procedures on receipt of any call, according to type or customer, reducing the need to refer to manuals, thus reducing the risk of errors and helping to meet response times.

- Case Management allows operators to keep on-going incidents active whilst continuing with their call handling responsibilities. This allows different conversation strands and calls to be stitched together to follow any incident from initiation to completion.

- Data Navigator allows operators to quickly find the information that they need and to browse all the data within their scope.

- Call meanings can be edited on an individual, rather than global, basis providing not only operators with the type of device raising the call, but also its location within a property for example.

## Operational Management Benefits

- **PNC7**'s analytics functionality provides detailed near real time views on operational compliances and KPIs through dashboards, which can be published on wall boards, through web pages, or delivered to mobile devices.

- Case management and bespoke reporting capability support compliance to SLA, and on-going management of service delivery, including for value added services such as lone worker monitoring, bogus callers, dementia care and falls management.

- Service Manager provides an environment for managing staff schedules, equipment and data onboarding, modification and decommissioning, reducing data entry duplication and providing a single point of access for all management tasks, based on operational procedures.

- Particular call types can be automatically directed to individual operators with distinct skill sets to optimise centre performance.

- A wide range of protocols are supported for unsurpassed interoperability, including Tunstall's patented STMF protocol for improved system resilience.

- Adherence to Telecare Services Association's Code of Practice parts 1, 2 and 3 are supported.

## Strategic Benefits

- Consolidation features mean call handling can be shared across multiple authorities using distinct **PNC7** systems. Centres may be streamlined to operate during office hours only, with out-of-hours calls, planned outages and disaster recovery automatically promoted to the workstations of nominated operators when needed without the need for them to log out or move to another workstation, and no replication between servers is required.

- Analytics and business intelligence supports the overlay of publicly available data sources and geo location options such that strategic planning and resource management can be matched to resource-heavy areas.

- Use of the Microsoft technology stack makes **PNC7** more easily integrated into existing systems, reducing reliance on third parties for implementation.

- PNC offers a variety of integrations with third party systems, such as those delivering:

  Invoicing; mapping services and applications; Online cameras; Voice recorders; Address software; Operator evaluation software; Service management suite; Business intelligence; Analytics; Data Warehouse; PBXs; Configurable launcher for 3rd party parameterised applications, which enables individual records to be linked to software applications.

- API connectivity via Service Manager provides an integration end point that may optionally provide linkages to social care and assessment systems.

# Technology you can trust

Tunstall has been at the forefront of delivering pioneering telehealthcare solutions for more than 55 years, and our person-centred technology supports more than 3.6 million people worldwide, empowering them to live their lives to the full.

We offer end-to-end solutions encompassing software and hardware development; world-leading manufacturing and technical standards; unsurpassed installation and customer service; and uninterrupted monitoring solutions.

Our monitoring centre software is supported by a team of specialist IT engineers, dedicated to providing on-going, specialised technical support from specification to implementation and beyond.

A British manufacturer with a global presence, the majority of the world's monitoring centres operate using Tunstall's PNC software.

If you'd like further information, or a demonstration of PNC7 in action, visit **tunstall.com** or call **01977 661234**

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