TSA Good Practice Guide

Telecare Service Providers in Scotland and the Scottish Ambulance Service – working together to improve service delivery

August 2013

Scottish Centre for Telehealth & Telecare
jit joint improvement team
tsa telecare services association

INTRODUCTION

The Quality Strategy is the approach and shared focus for all work to achieve the aims of delivering the highest quality healthcare to the people of Scotland and ensure that the NHS, local authorities and the third and independent sectors work together, and with patients, carers and the public, towards a shared goal of world-leading healthcare, in support of the 20:20 Vision.

At the core of the strategy are three Quality Ambitions:

- **Safe** – There will be no avoidable injury or harm to people from healthcare, and an appropriate, clean and safe environment will be provided for the delivery of healthcare services at all times.
- **Person-Centred** – Mutually beneficial partnerships between patients, their families and those delivering healthcare services which respect individual needs and values and which demonstrate compassion, continuity, clear communication and shared decision-making.
- **Effective** – The most appropriate treatments, interventions, support and services will be provided at the right time to everyone who will benefit, and wasteful or harmful variation will be eradicated.

This vision, with its focus on quality healthcare, provides the context for all strategic and operational decision-making across healthcare in Scotland.

Recognising these ambitions, Scotland is one of the few areas in the world with a single, unified approach to telehealth and telecare, with a National Telehealth and Telecare Delivery Plan for Scotland to 2015. It was developed in conjunction with partners across services as diverse as health, social care, housing, the third sector and the independent sector. It provides continued strategic direction for the use of Telehealth and Telecare within Health, Social Care and Housing in Scotland.

Under workstream 6 of the Delivery Plan, develop[ing] guidelines, standards and integrated protocols between telecare services and national emergency services, e.g. Scottish Ambulance Service, NHS 24, was identified as one of the recommended actions, and this document forms part of the response to that action.

PURPOSE

The Scottish Centre for Telehealth and Telecare (SCTT), Joint Improvement Team (JIT), Scottish Ambulance Service (SAS) and the Telecare Services Association (TSA – the representative body for the delivery and development of telecare and telehealth services in the UK), have developed this Good Practice Guide with the aims of improving:

- joint working between Telecare Service Providers (TSPs) in Scotland and the SAS; and
- user and patient experiences.

The Guide also recommends an approach and process in support of integrated protocols between TSPs and the SAS.

It will always be good practice for TSPs to engage in some form of regular direct communication with the Ambulance Service, and vice-versa. The Ambulance Control Centre can provide advice on developing local procedures that ensure good patient safety and appropriate advice and responses if required.

Contact details can be found at http://www.scottishambulance.com/footer/ContactUs.aspx.

BACKGROUND

In the UK, if an individual is seriously ill or injured, and their life is at risk, members of the public are advised to telephone 999 and to ask for the ambulance. When necessary, specific clinical advice is given over the phone, for example what to do if someone is choking or instructions on how to perform Cardiopulmonary Resuscitation (CPR) and more general advice in specific emergency situations.

If an ambulance or a paramedic is required – a decision that is made after an ambulance 999 operator has asked a serious of questions to establish what is wrong to allow them to establish the most appropriate response – then the SAS will dispatch the relevant vehicle. SAS is a national operation based at over 180 locations over five Divisions with the service co-located with NHS National Services Scotland (NSS), NHS 24, and local NHS Boards' Out of Hours services and within hospital and GP practice premises. The SAS covers the largest geographic area of any ambulance service in the UK.

Key facts

- As the front line of the NHS services in Scotland the key role of the SAS is to respond to 999 calls as quickly as possible with the most appropriate skills and equipment.
- They operate around 450 emergency ambulance vehicles and have three Emergency Medical Dispatch Centres covering Scotland.
- In 2011/12 they answered 854,547 calls and responded to more than 600,000 accident and emergency incidents. The majority of calls do not involve serious injury or illness and some people are not taken to a hospital Accident and Emergency Unit.
- Many people who call for an ambulance can be assessed and can often be referred to a more appropriate service allowing more people to be treated and remain at home.
- Some alternative options rather than calling 999 include:
  - Calling NHS 24 (08454 242424)
  - Local GP services (both in hours and out of hours)
  - Community pharmacists
  - Going to a NHS walk-in centre or minor injuries unit

These alternatives reduce the demand for ambulances enabling the highest priority emergency calls for life threatening incidents to be dealt with more efficiently and effectively.

There is good evidence to show that TSPs can help to advise service users of the most appropriate ways of receiving both medical and non-medical attention and also help reduce the demand on the Ambulance Service, and help to alleviate the pressures on emergency departments.

In particular, TSPs have excellent protocols and communications with social work departments, local authority emergency duty teams, and third sector organisations which can help support and advise vulnerable people when 999 services are inappropriate.

GUIDELINES FOR TELECARE SERVICE PROVIDERS

Responding to Emergencies – SAS Call Prioritisation

There are many situations when it is entirely appropriate for a call from a client/carer to the TSP Alarm Receiving Centre (ARC) to be referred to the ambulance service; a call handler at an ARC should immediately dial 999 when an emergency situation arises including:

- Chest pain
- Difficulty in breathing
- Loss of consciousness
- Severe loss of blood
- Severe burns or scalds
- Choking
- Fitting/convulsions
- Drowning
- Severe allergic reaction; and
- Head injuries

To assist the ambulance service in their prioritisation of calls, it is important that call handlers gather as much information as possible from the client/carer about what is wrong with the person (ideally before dialling 999), thus ensuring that the person receives the most appropriate response and on-going care. All emergency 999 calls to the ambulance service are prioritised to ensure life-threatening cases receive the quickest response, with SAS triage system coding calls into one of three categories:

Category "A" (red) is an "immediately life threatening" call and will result in the closest appropriate resource being sent under emergency response. This may include both an Ambulance and Paramedic Response Unit (PRU). An example would be a cardiac arrest or heart attack. The standard to reach these calls is 8 minutes on 75% of calls.

Category "B" (amber) is a "serious emergency" call and will result in an ambulance being sent under emergency response. An example would be a time critical stroke or road traffic accident with people trapped. The standard to reach these calls is 19 minutes on 95% of calls.

Category "C" (green) is a "less serious injury or illness" and will have either an ambulance sent under normal road conditions or will be referred to NHS 24. These calls will have the ambulance stood down for a category A or B call. The standard to reach all these calls is within 1 hour.

Dealing with Illness

ARC call handlers can also play an important role in helping to reduce the number of calls wrongly considered to be immediately life threatening by asking a number of questions:

- Are they alert?
- Distressed and/or unable to communicate?
- Any difficulty breathing?
- Chest pains or other significant pain?
- Any serious bleeding?
- Loss of consciousness, dizziness or collapse?
- Is there concern over other symptoms such as fits, medication overdose, burns or scalds, choking, clammy or sweating, changing colour, sudden headache, numbness?

Patients will always be taken to hospital by SAS when it is appropriate, however many ambulance staff undertake detailed assessments, clinical tests and procedures which enable them to refer patients to other health professionals, avoiding hospital admissions where possible.

The ability of the call handler to call on family members, named key holders or a local Responder Team (see below) to attend the service user can help an ambulance crew to manage risks, and 999 operators should always be made aware of attempts to involve family members/key holders or responder teams.

Many ambulance crews can admit patients to specialist units and administer a wide range of drugs to deal with conditions such as diabetes, asthma, stroke, heart attacks, allergic reactions, overdoses etc. so there are great advantages in the call handler being able to pass on to the 999 service relevant details of the service user's medical history. The sharing of outcome information by SAS may also be appropriate so that the ARC is able to advise family members, homecare staff and other members of the community support team if the service user will not be returning home immediately.

Where an individual is experiencing extreme mental distress, perhaps leading to a psychiatric emergency, there should be agreed referral routes in place involving an appropriately qualified medical practitioner and Mental Health Officer. If a medical practitioner attends, then they assume responsibility for the situation and, if applicable, will follow the procedures as provided in a local areas Psychiatric Emergency Plan*, which will be in place as part of the Code of Practice accompanying the Mental Health (Care & Treatment) (Scotland) Act 2003. This, in part, deals with transport issues and the role of the SAS, and overrides anything in this good practice guide.

**Psychiatric Emergency Plan's allow potential local difficulties to be addressed and contingency procedures put in place before they arise for real. The development and aim of such a plan would be: to agree procedures that would manage the transfer and detention processes in a manner which minimises distress and disturbance for the person; and to ensure as smooth and safe transition as possible from the site of the emergency to the appropriate treatment setting.*

Dealing with Falls

One of the most common reasons for an ARC call handler to request an ambulance when the situation is not immediately life threatening is for falls.

Key facts

- **Falls and fractures, in people aged 65 and over, account for over 18,000 unscheduled hospital admissions and 390,500 hospital bed days each year in Scotland.**
- Average lengths of stay for falls and hip fracture admissions exceed those for other emergency admissions in the same age groups: average lengths of stay for falls and hip fractures in the 75+ population are 25 days and 36 days respectively (compared to an average stay of 13 days for a Chronic Obstructive Pulmonary Disease (COPD) admission in the same age group) (2010/11 data provided by Information Services Division (ISD) Scotland
- In addition, in the over 65 population, falls cases are the largest single presentation to the Scottish Ambulance Service (over 35,000 present each year) (ref: SAS, 2011), **one of the leading causes of Emergency Department attendance, and are implicated in over 40% of Care Home admissions** (ref: American Geriatrics Society, British Geriatrics Society, 2001).
- Post - fall syndrome, a combination of fear of falling, anxiety, loss of confidence and depression is prevalent, leading in many to an inability to carry out day to day activities and social withdrawal and isolation.

Falls can be caused by many factors; the reason for the fall should be established wherever possible by the ARC call handler and recorded consistently for reporting and care management purposes. If the person has not already been identified as at risk of falling then they should be referred for a more specialist falls risk assessment to prevent a further fall happening via established referral routes to relevant services.

Most people who fall are not injured, but may need assistance to get off the floor; this may not be an immediately life threatening situation though being on the floor for an extended period of time can lead to serious problems and a loss of confidence to live independently. Falls down steps or from a height are more significant than falls from standing heights and could mean serious injuries and warrant the need for a thorough medical examination. Falls that lead to the sustaining of a head injury warrant medical assessment.

Service users who have telecare equipment, such as worn fall detectors and bed occupancy alarms, should already have received a full assessment and should have been professionally judged as being at risk of falls and serious injury. Response protocols should, under such circumstances, be agreed with the SAS so that the calls may be dealt with appropriate priority, irrespective of whether the service user has been able to confirm the nature of the problem (but taking into account the role of local Mobile Responder Teams, where available).

The priority given to falls incidents may also be dependent on the availability of family members or informal carers to attend, and also on whether the telecare service has an emergency responder service with staff trained in handling and moving and with access to appropriate lifting equipment.

If a responder team deal with a service user after a fall without the need for calling an ambulance then appropriate referral processes into health services should be developed so that the person can receive appropriate falls risk assessments with the aim of preventing further falls or to enable them to get up safely following a fall.

Requesting ambulance service assistance when there is no apparent injury and, hence, **only for handling and moving purposes, is not an appropriate use of emergency services**; local systems and protocols should be put in place by health, social care and housing partners to be able to respond effectively to such situations.

Appendix 1 provides a Triage Tool that may support ARC call handlers to judge whether a call to the SAS is required.

Access to Service Users Homes

Access to the service user's home is often an issue. **TSPs should ensure, where possible, all service users' homes have a means of access in case of emergency.** This can be a reliable 'Key Holder' who will arrive promptly or perhaps a key safe installed at the property and the access code registered with the ARC.

The user is usually asked to name one or more 'key holders' so that, if they are unable to answer their door when in difficulty, someone else can. The nominated key-holder is often an unpaid carer (any person, such as a family member, friend or neighbour who provides support or on-going assistance to another person without payment for the care given). Unpaid carers often play a critical role in providing a response in an emergency or enabling access for responder services, and databases should be regularly maintained to ensure contact details are accurate and up-to-date.

Role of Mobile Responder Teams

Some areas in Scotland employ teams of specially trained personal carers to provide the main response service to most emergency calls. Other areas use mobile responders, or similar, who can provide practical help in an emergency, and can appraise a situation (such as a fall, or failure to answer the door) so ensuring that the appropriate emergency service is called.

Over the past three years the use of lifting cushions and associated equipment by responder services (to assist people remobilise following a fall) has grown rapidly. Use of such equipment is now well established within teams in 23 out of the 32 local authorities in Scotland, with the introduction of this equipment appearing to have significantly reduced the number of calls to the ambulance service and enabled service users to remain in their own homes.

Local agreements should be in place for both first responders from ARCs and escalation procedures in the event that the services of SAS are subsequently required.

Appendix 2 is a case study of a local agreement (Memorandum of Understanding), in this case between Cordia (Services) LLP and the Scottish Ambulance Service in 2012.

PARTNERSHIP WORKING GOING FORWARD

Whilst consulting on this Good Practice Guide, a number of priority areas for improved partnership working locally were identified, including:

- Algorithms developed by SAS to be used by call handlers at ARCs to determine how best to respond to falls and other medical problems; they have been shown to lead to a reduction in the number of inappropriate 999 calls and have resulted in more appropriate care for individuals. These algorithms may be included in the protocols of ARCs for dealing with alarm calls for medical reasons and falls and for use in triage so that they can request an ambulance via 999 in only those circumstances where this is appropriate.
- SAS and TSPs to work together to enhance questioning skills by call handlers in the ARCs.
- TSPs to share with SAS information held as appropriate in order to provide the best care and support of the service user, via data sharing protocols.
- Protocols for information sharing to be developed between the TSPs and the SAS and a system for regular review of procedures to be undertaken.
- Sharing of statistical data should be undertaken for service reviews as appropriate, via the agreement of data sharing protocols.
- Joint reciprocal visits to ARCs and SAS should be undertaken to ensure understanding of roles.
- Joint training to take place to enhance service delivery e.g.
    - to help advise ARC call handling staff in ways of identifying life threatening conditions;
    - to support training of TSP staff in first aid and injury assessment due to the benefits seen by a reduction in calls referred to 999 services;
    - to raise awareness of SAS operators in the role of telecare and ARCs in the support of service users to live independently in the community.
- Falls strategy – discussions to take place with local health, social care providers and SAS to develop the most appropriate responses and joint processes for people who have had a fall and to take advantage of the outcomes of any published case studies.
- SAS should be provided with details of available telecare services in the area so that patients may be advised of the benefits of such services.

Ultimately, the most important thing is to ensure that **regular two-way communication** between TSPs (and Local Authorities, where appropriate) and the SAS is established, with local agreements in place to ensure consistency of service provision and appropriate response protocols are in place.

To support ongoing implementation and engagement with our stakeholders TSA encourages feedback. Comments on this good practice guide should be sent to Marian Preece – **marian.preece@telecare.org.uk**

APPENDIX 1

TRIAGE TOOL FOR ARC CALL HANDLERS

When an alarm call is received in the Alarm Receiving Centre (ARC) from a service user how do you prioritise what to do? If the call handler at the ARC is able to communicate with the service user, then the following triage tool may be used to identify whether an ambulance is required:

Questions	YES = 999	No – alternative pathway to be followed
Do they have chest pain?		
Have they got any difficulty breathing?		
Have they lost consciousness (and recovered)?		
Are they bleeding heavily?		
Have they choked on anything?		
Are they having a fit/seizure?		
Are they having an allergic reaction?		
Have they hit their head?		
Are they clammy?		
Do they have any stroke signs (numbness, loss of ability to talk properly, weakness)?		
Have they burnt themselves?		
Have they hurt themselves?		

If the service user is unable to communicate with the ARC, the ARC call handler should attempt to contact the service user via the telephone or through the telecare communication system. If this fails, then efforts should be made to contact the next of kin/informal responders/key holders etc. details of which are held at the ARC. If no contact can be made the following steps should be considered (with ambulance control assistance if necessary) to determine if an ambulance should be dispatched:

Checklist	Yes = 999	No – alternative pathway to be followed
Check medical history, highlight any acute conditions (respiratory, acute asthma, stroke, acute heart condition, etc.) that may be of use in categorising ambulance call		
Check notes/absence alerts, highlight if discharged from hospital in the last 5 days		
Check incident notes/reports, highlight if medical assistance required in the past month		
Check call history for call pattern for emergency help needed in past month		

APPENDIX 2

CASE STUDY

MEMORANDUM OF UNDERSTANDING BETWEEN CORDIA (SERVICES) LLP AND THE SCOTTISH AMBULANCE SERVICE

Background

Following a Fatal Accident Inquiry (FAI) in January 2012, Cordia (Services) LLP (Telecare Service Provider for Glasgow City Council) carried out a review of its procedures in relation to "no response" calls (i.e. a client-generated alarm where there is no verbal communication) and negative response calls (i.e. a confused response or a call where the call handler is unable to determine the reason for the call), and introduced revised procedures.

In February 2012, Cordia (Services) LLP and the Council's Legal Advisor met with the Senior Heads of the West Central Division of the Scottish Ambulance Service (SAS) to discuss the findings of the FAI and the introduction and impact of the revised procedures. Issues which were highlighted were as follows:

- The increase in the number of emergency calls from Cordia to SAS;
- The impact on SAS resources in responding to the increased demand from Cordia's ARC;
- The number of calls where the services of a paramedic unit, or clinical intervention would be required;
- A differing view on the legal interpretation of determination in the FAI.

Cordia and Glasgow City Council's Social Work Services co-ordinated a number of discussions with the SAS, NHS24's Medical Director and the Director of the Joint Improvement Team to establish a Memorandum of Understanding (MOU) setting out a joint community alarm protocol (see Annex). This established clear protocols and new call handling procedures between Cordia's Community Alarm Service and SAS on how negative response calls (confused responses) and no responses would be triaged to ensure minimum risk to the service users.

Cordia and the SAS agreed to pilot the new agreed procedures for a three month period between September 2012 and November 2012, with the table below detailing the activity logged during the pilot:

Cordia/Scottish Ambulance Service Pilot				
Calls Received/Made by Cordia's Community Alarms and Telecare Service	September	October	November	Total for Period
Number of Days	30	31	30	91
Total number of negative/ confused calls requiring 999 Ambulance	16	5	3	24
Total number of No Response calls passed to SAS to respond	33	48	41	122
Total number of 999 ambulance calls made for medical emergencies	105	77	96	278
Total number of 999 ambulance calls placed per period	154	130	140	424
Total number of no response and confused response calls SAS attended where ambulance control confirm genuine emergency call	13 26.5%	14 26.4%	11 25.0%	38 26.0%
Total number of no response calls Cordia responders attended	30	39	43	112

Outcome

At the end of the pilot, the following was agreed:

- Agreement from both organisations that the MOU and resultant revised methods of working were delivering the right outcomes, leading to full implementation of the MOU with no amendments, along with the agreed new call handling procedures.
- Call monitoring criteria agreed to categorise calls that both organisations could monitor independently to ratify results.
- Monthly internal performance meetings.
- That attending a 26% average for no response/ confused response calls was acceptable to the SAS
- Cordia and the SAS (West Central Division) would continue to meet quarterly to discuss any issues or service development that would impact on either organisation.

Cordia continues to share information with Glasgow City Council's Social Work Services to ensure they are fully informed of the service changes agreed as a result of the MOU.

APPENDIX 2: ANNEX

Scottish Ambulance Service – Ambulance Control Centre

Community Alarm 999 Protocol

Call Prioritisation

The Scottish Ambulance Service triage systems codes calls into three categories.

- Category "A" (red) is an "immediately life threatening" call and will result in the closest appropriate resource being sent under emergency response. This may include both an Ambulance and Paramedic Response Unit (PRU). An example would be a cardiac arrest or heart attack. The standard to reach these calls is 8 minutes on 75% of calls
- Category "B" (amber) is a "serious emergency" call and will result in an ambulance being sent under emergency response. An example would be a time critical stroke or road traffic accident with people trapped. The standard to reach these calls is 19 minutes on 95% of calls.
- Category "C" (green) is a "less serious injury or illness" and will have either an ambulance sent under normal road conditions or will be referred to NHS 24. These calls will have the ambulance stood down for a higher acuity call. The standard to reach all these calls is within 1 hour.

Medical Priority Dispatch System:

The International Academy of Emergency Medical Dispatch licence the Medical Priority Dispatch System (MPDS) used by Scottish Ambulance Service.

Community Alarm Calls

Community Alarm calls should normally be managed under the MPDS "card set" most suited to the patient's chief complaint. This is normal business for all emergency calls.

Where a call is received and the chief complaint is "unknown" the call should be managed under protocol 32. The academy advises under protocol 32 rule 5 for unknown problems that:

"Community Alarm notifications should drive a locally determined response assignment; this should be followed by an attempt to contact the patient for further information, prioritisation and care. When further information is available a more specific protocol should be used."

Process

In cases where the Community Alarm provider has direct contact with the patient through the alarm system this should be the channel used to triage the call through MPDS and allow the most appropriate response to be made.

If the Community Alarm agency has closed the line to the patient and they do not have the required information to triage the call, they should be asked to reopen the line and when possible take the patient through the full MPDS protocol with the EMD. This is similar to the system used via Language-line.

It should be kept in mind this does not delay a response as a response is mobilised often before the code is completed.

When the Community Alarm provider already has valid clinical information on the patient that may trigger an ambulance response, for example a patient with known epilepsy, cardiac condition, recently discharged from hospital, etc. and would be deemed to be at higher risk, this call will be coded through MPDS on the known clinical information and condition.

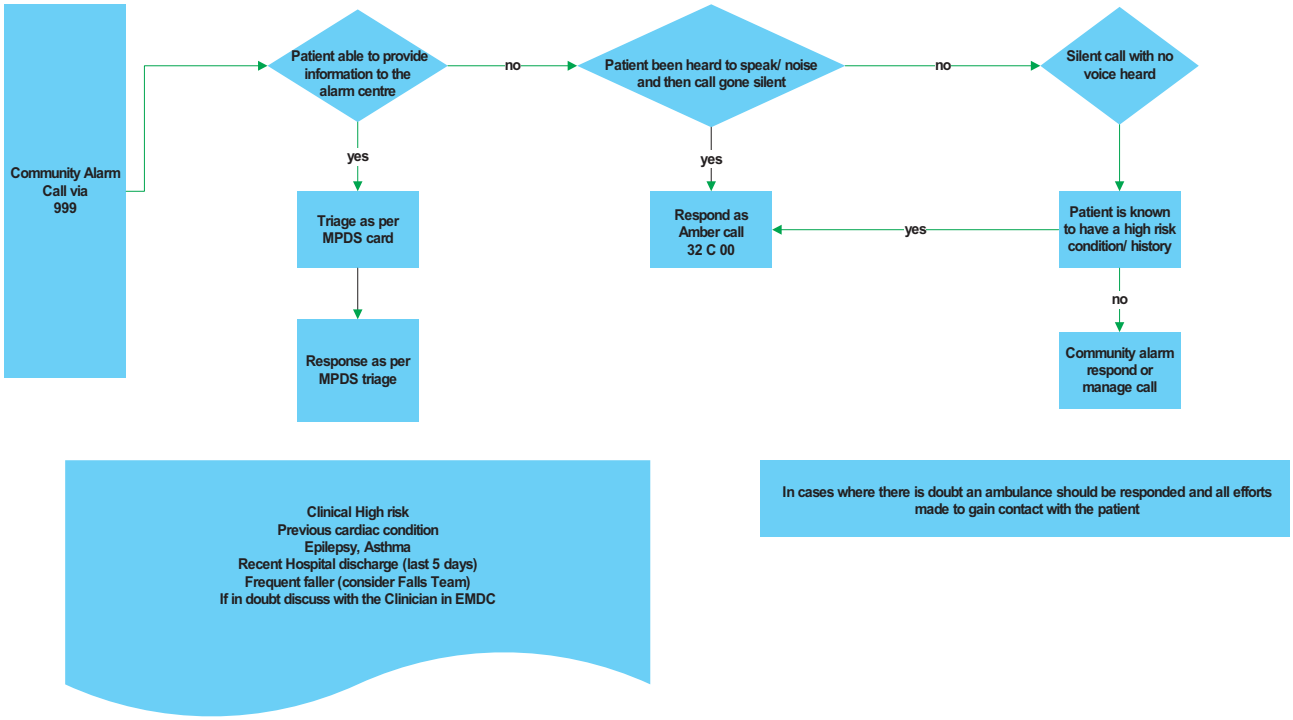
In cases where there is confusion about the availability of information, an ambulance response should be sent and all efforts made to regain contact with the patient.

In cases of silent alarm activation the Community Alarm provider will respond or manage the call under their protocols.

Flow narrative

The ambulance control centre – community alarm flow (below) provides a schematic to the protocol and can be summarised as:

1. Voice communication with Patient: Full MPDS protocol applied and call coded as normal business.
2. Voice communication with patient and then silence on call: MPDS protocol 32 with Amber response.
3. No voice communication with patient at any time: Patient is in known high risk category - Amber response.
4. No voice communication with patient at any time: Patient risk level not known - Community Alarm provider provides response or manages call under their procedures.



Telecare Services Association Membership Services Centre Suite 8 Wilmslow House Grove Way Wilmslow Cheshire SK9 5AG
Telephone 01625 520320 www.telecare.org.uk